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Nigeria Electricity Market Reform

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Working Paper:

Management Contracts for NEPA Distribution Companies

Submitted by

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Section 1 Introduction

1.1 BACKGROUND

USAID has contracted Nexant to provide technical assistance to the National Electric Power Authority (NEPA) on corporate restructuring. The objectives of the USAID program are to implement market-based reforms and attract private sector participation.

The Federal Government of Nigeria is considering the use of management contracts as a way to harness private initiative in the electricity distribution sector prior to privatization of the distribution companies ("DisCos"), which will be spun off from NEPA. Management contractors are expected to introduce international best practices, improve operating performance and speed up the pace of change.

The objectives of this report are: 1) to recommend the organization and functions of the management contractor; 2) to recommend the approach to tendering; and 3) to provide sample terms of reference for the contract.

This report provides recommendations on a specific type of DisCo management contract suitable for NEPA DisCos. The recommendations are based on the following two background analyses: 1) an assessment of relevant international examples and 2) a screening study of alternative approaches to management outsourcing ranging from management advisors to concession arrangements. The background studies are summarized in appendices at the end of this report.

1.2 OVERVIEW OF MANAGEMENT CONTRACTS

Management contracts of the type proposed for NEPA have been used in the electricity sector in other countries, and extensively in other industries, such as the water sector. Under a management contract, the contractor manages the business on behalf of the existing owners of the DisCo (i.e. NEPA) using the existing staff of the DisCo. There is no transfer of ownership of the assets to the contractor, nor is the contractor required to invest its own funds into new investments. The contractor is compensated for the management services that it provides.

Generally management contracts of this type last for 2-3 years and include specific objectives to be completed during that time period, for example, preparation of the company for privatization. The management contract approach can be implemented at one or more of NEPA's eleven Distribution Zones.

For a management contract to be successful, certain conditions are required, including:

- Maximum autonomy from NEPA;
- Broad span of executive control, so that the new managers are in a position to introduce any necessary changes in business and operating procedures at the DisCo required for improved performance;
- Performance based compensation, that provides incentives to the contractor to achieve specific performance improvements for the DisCo; and
- Availability of investment funds, to support improvements in operating procedures.

1.3 CONTENTS OF REPORT

This report covers the following areas:

- Section 2: Management Contractor Organization and Functions – Recommends the structure of a management contract for a NEPA DisCo to meet the conditions described above.
- Section 3: Tendering Approach – Describes the tender evaluation team, the tendering process, the timeline and bid evaluation methodology.
- Section 4: Sample Terms of Reference for Management Contract – Provides a sample TOR that can be used for recruiting consultants for management contracts.
- Appendix A: International Experience with Management Contracts – Summarizes experience with management contracts in Tanzania, Lesotho, Guyana, Gaza and Jordan.
- Appendix B: Options for Outsourcing DisCo Management – Presents the screening study of alternative approaches for outsourcing DisCo management ranging from management advisors to management contracts to concession arrangements.

Section 2 Management Contractor Organization and Functions

This section outlines the scope and structure of the proposed management contracts for the Distribution divisions of NEPA. It describes the scope of services that would be covered by the management contract, the personnel that the contractor would be required to provide and the form of compensation that they will receive. The objective of the Management Contract is to provide services to the DisCo that will lead to a sustainable improvement in operations and transfer of knowledge to the DisCo staff. The structure of the Management Contract is designed to replicate the lessons learned from international experience with similar contracts, namely to:

- Clearly define the roles of NEPA and the contractor
- Clearly allocate the risks between NEPA and the contractor
- Set achievable performance targets
- Clearly link incentive fees and performance

These recommendations are based on the international experience with management contracts in both the electricity and other industries. Appendix A provides several relevant international case studies of utility management contracts.

2.1 SCOPE OF SERVICES

Under the Management Contract, the contractor would be responsible for the overall operations and maintenance of the distribution companies assets, as well as the day-to-day supervision and management of the DisCo staff. They will have full autonomy over all aspects of finance and operations of the DisCo.

It is important that the contractor has full responsibility for the operation of the assets, without second-guessing by NEPA management, in order to affect the necessary operational improvements. Without full operational control, the Contractor will not be able to implement the required changes in operating procedures to achieve operating improvements.

Bidders for the management contracts should be able to bid to provide services to one or more of the DisCos. The bidders may have economies of scale in servicing more than one contract, which could reduce the overall cost to FGN.

The duration of the contract should be at least three years with the option to extend the contract for an additional year. The contractor will face up to a one-year learning curve; therefore most of the benefits can be expected in years two and three.

2.1.1 Operations and Maintenance

The contractor will be responsible for the day-to-day operations and maintenance of all distribution facilities, within the service territory of the DisCo. The contactor will also be responsible for a preventative maintenance program, including developing a schedule for equipment repair, and a system for recording data on maintenance requirements and activities. This includes undertaking an inspection of the facilities to identify any deficiencies related to the safety and security of their operation.

Since the high level of distribution losses are one of the biggest issues facing the sector in Nigeria, reducing these losses will be a prime objective of the management contract. The contractor will be required to develop and supervise a program to reduce technical distribution losses on the system, through improved maintenance of facilities, expansion of metering, etc. Specific performance targets could be included in the contract.

Since the contractor will be compensated in part based on performance targets, they will be required to track the data necessary to quantify the performance objectives. In particular, they will be responsible for managing all data records related to these activities including:

- Inventories of the condition of facilities and equipment
- Inventory of the metering regime
- Quantification of distribution system losses by month
- Quantification of forced outages by region, by month
- Description of forced outages by substation/feeder and region, by month
- Customer database, including meter data, billings and collections

2.1.2 Financial Management

The contractor will be responsible for all aspects of financial management of the DisCo, including the development and tracking of budget expenditures, billing of customers and collection of revenues. The contractor will prepare the budget for the DisCo that will be subject to approval by the Market Operations Committee. They will be required to keep within the agreed upon budget.

The contractor will assume control of cash, receivables, payables and budgets for the DisCo and for managing the cash transfers to and from the Market Operator. They will be responsible for maintaining all accounting data, according to generally accepted accounting principles and standards. This will include updating the customer database to track meter data, billing and payments data and tracking un-paid bills.

Since the main objectives of the management contract, and the primary performance target, will be to improve the level of collections at the DisCo, the contractor will be required to develop and supervise an improved revenue management system to reduce commercial losses on the system, and increase the level of collections.

2.1.3 New investments

The level of available funds for new investments will be determined by the NEPA Board. If there are funds available for investment in new equipment or facilities, then the contractor will be responsible for managing the investment process.

The management contract will specify the range of new investments to be carried out by the contractor. The contractor will have sole responsibility to complete the specified investment program. Investments will be prioritized to those required to achieve the performance improvements outlined in the management contract, including increases in collections, reduction in distribution system losses, and improvements in the reliability and quality of power supply. [1]

Any purchases under the investment plan will be carried out according to agreed upon procurement principles. The contractor will be required to retain documentation showing the tendering process, goods and services purchased, and prices paid, to track investment expenditure.

2.1.4 Organization chart

Figure 1 shows the proposed top-level organigram for a DisCo under a management contract. The positions allocated to the management contractor are shown shaded. All positions will be full-time for the duration of the contract and will be based at the DisCos head office.

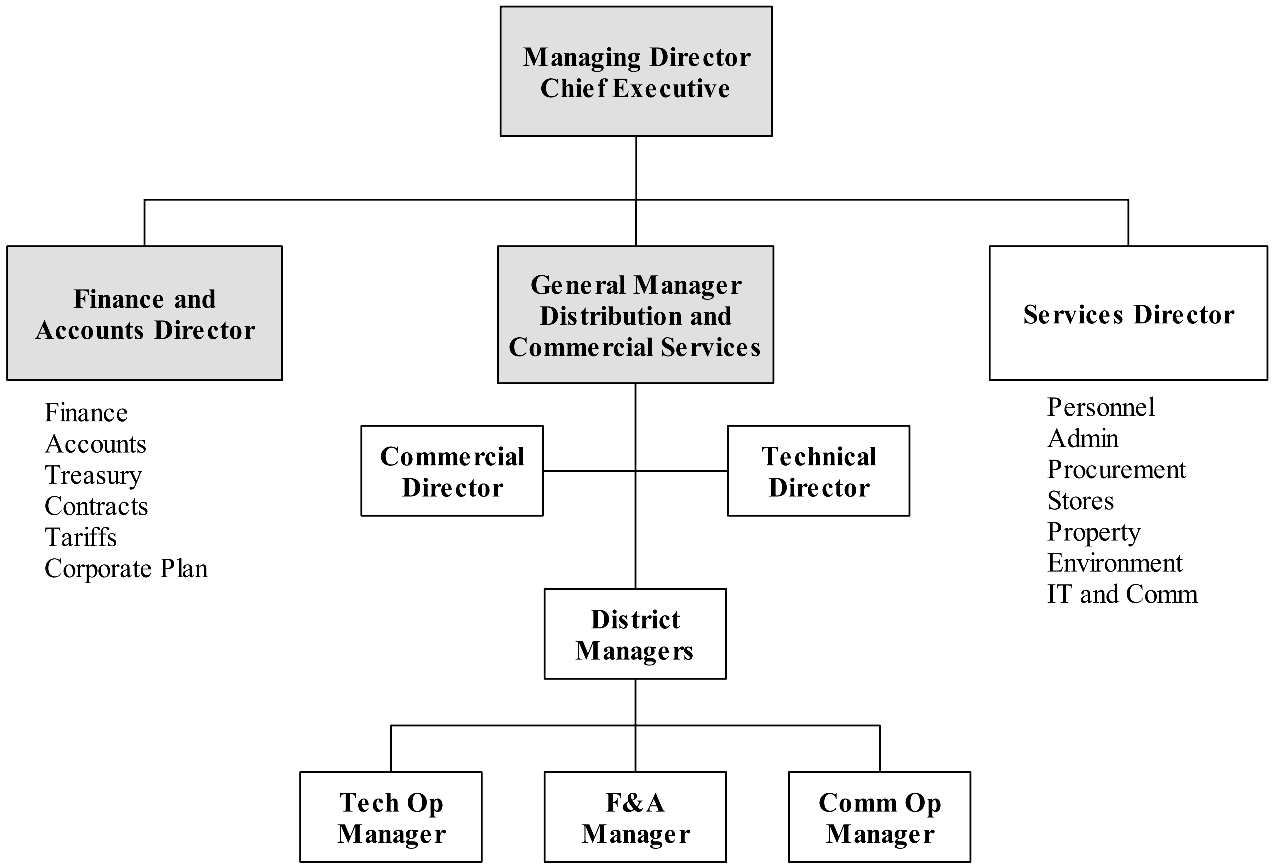

Figure 1: Top Level Organigram for DisCo under Management Contract

[1] For additional information on budgeting, procurement and transfer pricing guidelines during the transition stage market, see the following Nexant reports:

- *Financial Autonomy for NEPA New Business Units* (Oct 2003)
- *Priority Reforms for the Nigerian Electricity Market* (April 2003)
- *Bulk Supply Charges & Cash Allocation during the Initial Phase* (March 2003)
- *Procedures & Guidelines for the Preparation of Operating & Capital Budgets* (August 2002)

The contractor should be required to fill the following three key positions:

- Managing Director
- General Manager, Distribution and Commercial Services
- Finance and Accounts Director

The contractor will be responsible for the management of the DisCo at the Zonal Headquarters level. District managers will report directly to the contractor. The three top positions are allocated to the management contractor so that he can have the greatest impact on the operation of the DisCo, at least cost. The identified positions have the most significant impact on both the day-to day operations of the utility and long-term strategic direction. Establishing the management contract at the zone, rather than at the district, will have a broader impact on the operations of the DisCo. NEPA can also consider whether the District Manager positions should be allocated to the management contractor.

Under the above staffing plan, the management contractor displaces two NEPA staff: 1) the GM Zone and 2) the AGM Finance and Administration. The proposed new General Manager position does not exist at present and therefore does not displace an incumbent staff. NEPA has the option to retain incumbents as shadow managers to eventually succeed the management contractor. This will ensure efficient knowledge transfer, one of the key objectives of the management contract.

2.1.4.1 Managing Director/Chief Executive

The Managing Director will be responsible for the overall management of the DisCo. He will be the primary point of contact with NEPA HQ, and will make quarterly reports to the NEPA Managing Director on the status of the DisCo. He will coordinate all activities under the management contract and ensure efficient and reliable operations of the company. He will also oversee the financial condition of the DisCo. The Managing Director will also work with the BPE, Ministry of Power and Steel and other government entities to provide required information for legal compliance.

The Managing Director will have the following specific duties:

- Develop and implement broad mission and strategic goals for the DisCo
- Develop a strategic business plan for the DisCo
- Define and establish the annual technical and business performance objectives to meet the goals of the management contract
- Oversee activities and proper functioning of DisCo HQ, Districts
- Supervise the work of the AGM Finance, AGM Distribution and AGM Services
- Review and approve activity reports of each DisCo department as well as corporate financial performance statements, to determine progress towards attaining performance goals
- Evaluate performance of senior executives
- Provide quarterly progress reports to NEPA HQ and BPE and liaise as needed with NEPA HQ

- Lead the operational performance improvement activities at DisCo headquarters and district level offices
- Serve as a member of the DisCo board of directors, when formed

2.1.4.2 Finance and Accounts Director

The Finance and Accounts Director will be responsible for overall financial management of the DisCo, reporting to the Managing Director. He will be responsible for developing a budget for the DisCo, working with the Market Operations Committee to refine the budget, monitoring revenues and expenditures. He will supervise the cash flow payments to and from the Market Operator.

The Finance and Accounts Director will have the following duties:

- Assist MD in development of strategic business plan, establishing performance and operational targets for short- and long-term.
- Supervise preparation of monthly financial statements.
- Submit monthly financial reports to GM and the Board of Directors.
- Establish and supervise cost accounting procedures and systems.
- Set up accounting policies.
- Consolidate accounts from district divisions.
- Submit quarterly revenue and capital budgets and cash flow forecasts to the Market Operator and monitor actual expenditures and receipts against budget forecasts and report variances.
- Prepare financial forecasts.
- Define and establish specific financial and accounting performance objectives and targets.
- Monitor levels of accounts receivable and put in place procedures to increase the level of collections.
- Supervise the activities of the Principal Manager Finance and Accounts and Principal Manager Contracts and Tariffs, and other direct reports.
- Manage compliance with tariff proceedings.
- Prepare corporate plan.
- Manage business information systems, accounting systems and related software.

2.1.4.3 General Manager Distribution and Commercial Services

The General Manager Distribution and Commercial Services will be responsible for managing the day-to-day operations of the distribution and marketing functions, including engineering, maintenance and construction of the facilities, metering, billing and collections. He will report to the Managing Director. He will supervise the District Managers in the field, a Technical Director at Zonal HQ and a Commercial Director at Zonal HQ.

The GM will have the following duties:

- Establish and implement requirements, procedures and performance monitoring of the District managers.
- Implement a process to improve operations to meet performance targets.
- Supervise the customer billing and collections process, and implement a process to improve the collections process.
- Establish normal Distribution operating procedures and maintenance policies.
- Establish emergency distribution system operating procedures, including procedures related to load shedding.
- Prepare plans for the reinforcement of the system to meet load growth.
- Establish procedures to improve operating efficiency and track performance targets.
- Prepare proposed projects for extension and rehabilitation of the system, including a customer metering program and obtain engineering and budget approval of the projects.
- Ensure the collection, maintenance and provision of all meter data for the Market Agreement and Charges Model is provided to the PM Contracts and Tariffs.

2.1.4.4 Other positions

Short-term technical assistance may be required to implement new operating procedures or to evaluate the current status of the distribution system. The Management Contract should include the option to allow the contractor to provide short-term assistance in the areas of information technology, metering and billing systems, engineering, planning and human resources as necessary. The costs of these services should be included in the contractor's bid price.

2.2 RELATIONSHIP TO NEPA

The contractor will report directly to the NEPA Managing Director, who will be responsible for the oversight of the contract. The DisCo budget will be set by the NEPA Board in coordination with the Market Operations Committee. The Board will determine if there are any funds available for new investments.

The contractor will manage, supervise and pay wages, salaries and benefits of the NEPA staff at the DisCo, using the revenues collected and any transfers from the Market Operator. The contractor will be responsible for:

- Day-to-day supervision and management of DisCo staff
- Organizational structure;
- Performance evaluations;
- Re-assignment of DisCo Staff within the organization;
- Compensation;
- Union relations; and
- Comply with all the applicable Nigerian employment/labor laws.

2.3 COMPENSATION

2.3.1 Fees

The structure of the compensation for the management contracts should achieve several objectives:

- The risk to the contractor should be minimized in order to encourage companies to bid on the contract. There is significant uncertainty to a bidder regarding the current state of the distribution system in Nigeria and their ability to improve operations. The contract needs to be structured so as to not put any un-manageable risks on the bidders.
- All risks to the contractor should be covered in the performance fee. Bidders should be discouraged from including compensation for any risks in the outcome in the fixed fee portion of the compensation.
- Since the quality of the base data (at the beginning of the contract) is unreliable, there should be no penalty to the contractor if they are not able to make verifiable improvements off of the base year. This means that the performance fee can be zero, but never negative.

International experience with management contracts have shown that compensation that is tied in part to performance will lead to the most successful outcomes. For this reason we recommend that the contractor be compensated based in part on the success of their operations. The contractor will receive compensation of the following type:

- Fixed fee. The fixed fee for the duration of the contract (e.g., 3 years). This will be bid by the contractor as part of the proposal, and the final value will be negotiated with the winning bidder. The contractor will be paid 1/36th of the fixed fee each month for the duration of the contract.
- Performance fee based on the contractor achieving specific performance improvements. The performance fee will be paid annually, following the evaluation of the performance standards. The Performance Fee will be based solely on factors that are within the contractor's control. Their compensation will not be affected by factors that are outside of their control. The bidders should be informed of the planned level of the performance fee in the Terms of Reference for the Management Contract.

2.3.2 Performance incentives

As discussed above, international experience has shown that management contracts that include a performance incentive tied to verifiable improvements in the operations of the utility are most successful in achieving long-term improvements in the operations of the system. For this reason, we are recommending that a performance fee be included as part of the overall compensation for the Management Contract.

Payment of the performance fee will be based on the contractor achieving verifiable targets for improving operating performance of the DisCo. The performance targets will be designed to target improvements in company operations that are under the control of the contractor. The contract will specify a maximum performance fee that the contract can earn, if it achieves all of its performance targets. The actual performance fee will be based on the

Performance Factor, i.e., the extent to which the contractor met the performance targets. The final performance fee will be adjusted downward if the contractor does not meet all of the performance targets specified in the contract. For example, if the contractor meets 80% of the performance target, they will receive 80% of the performance fee. The performance fee should never be negative as this could discourage bidders from bidding for the contract, since they would face the financial consequences of factors beyond their control.

The performance fee will be calculated and paid annually at the end of each contract year.

2.3.3 Monitoring of performance incentives

Transparency in the implementation of the Management Contract will be crucial to earn public support for private sector involvement in the sector, and for any future privatization of the companies. For this reason, it will be important that the contractor is compensated based on verifiable operating improvements. In order to build trust between NEPA/BPE and to ensure that the contractor is fulfilling its performance obligations, the performance targets should be verified by an independent auditor before the performance fee is paid. At the end of each contract year, the auditor will measure the operating performance and assess those measurements against the required performance standards, to determine the actual performance fee.

Section 3 Tendering Approach

This section describes the proposed tendering process for a DisCo management contract. Topics covered are the Evaluation Team, the tendering process, the timeline and bid evaluation.

The objective of the tendering process is to ensure that the bidder with the best combination of technical skills and lowest cost will be selected to provide the management services for the DisCo. The process should ensure that the selected bidder has a minimum level of technical skills and experience required to complete the project and that the price paid is sufficient to cover their costs. It is important to prevent an outcome whereby the bidders offer a low bid in order to win the business, but need to subsequently re-negotiate the price.

The tendering process must also be transparent, both in actuality and in perception. Since it is likely that there will be some opposition to the use of a management contract, public support for the process will be undermined if there is the perception that the process for issuing the contract favors a particular bidder. For this reason, our recommended tendering approach is based on the World Bank "two stage" tendering process, which is recognized internationally as meeting both transparency and quality/cost criteria.

3.1 EVALUATION TEAM

In order to gain buy-in from the relevant stakeholders, the evaluation team should comprise members with experience in both the technical operation of the distribution system and utility finances. The team should be independent of any potential bidders for the management contracts.

The bid evaluation team should comprise representatives of NEPA and BPE (and their consultants), including:

- Technical evaluation – three evaluators and an independent advisor, with experience in the technical aspects of electric utility operations.
- Financial evaluation – three evaluators and an independent advisor, with experience in electric utility finances and/or awarding management contracts.

3.2 TENDERING PROCESS

The tendering process is designed to achieve the following objectives:

- Ensure that all potential bidders are informed of the opportunity to bid on the management contract and are in a position to submit bids in a timely manner. This is necessary to make sure that the most technically capable bidders offer their services, and that price competition between bidders leads to a lower price.
- Ensure that the tendering process is completed in a timely and cost effective manner, for both the BPE and the bidders. The tendering process should not require an excessive time input by the evaluation team, as this could delay the selection process and in turn the start of the management contract. Unnecessary delays will discourage bidders from participating, and could have an impact on the bid prices.
- Ensure that the bidder with the best combination of price and technical capability is selected.

- Ensure that the selection process is impartial in both appearance and reality. Transparency and impartiality are crucial for stakeholder buy-in to the contract.

Alert Potential Bidders
↓
Draft Information Memorandum
↓
Request for Expressions of Interest
↓
Pre-qualification/Short list of Bidders
↓
Establish Data room
↓
Draft Request for Proposal
↓
Issue Request for Proposal
↓
Pre-bid Conference
↓
Evaluation of Bids
↓
Negotiate/Award Contract

Figure 2: Tendering Process

The tendering process will include the following steps, as shown in Figure 2, and can be managed by BPE. The next steps for the tendering process are:

- Appoint consultants to refine the Terms of Reference (draft attached to this report) and develop other necessary terms and conditions for the contract.
- Provide technical experts to assist with the evaluation of bids.
- Alert potential bidders: If possible, BPE should discuss the proposed contract with potential bidders to gauge the interest of industry participants. This will provide feedback on the proposed approach of the contract.
- Draft Information Memorandum: this is the basic information on the proposed management contract, including the scope, duration, the objectives of the contracting organization, the type of skills required. The Information Memorandum should provide sufficient information for potential bidders to submit Expressions of interest for the management contract.
- Publish the request for Expressions of Interest (EOI): The request for EOIs should include the Information Memorandum, timeline for submitting expression of interest, an indication of when the short-list of bidders will be published, etc. The request for EOIs should be advertised as well as sent to specific targeted bidders, to maximize the potential interest in the work. At a minimum the EOI should be sent to the companies that were short-listed for the TANESCO management contract, namely:
  - ESB International - Ireland

  - Eskom Enterprises (pty) ltd – South Africa
  - IberAfrica – Spain
  - NetGroup Solutions – South Africa
  - NRECA International – USA
  - Vattenfall – Sweden
  - AES – USA

  These companies have previously expressed interest in projects of this type and have already demonstrated sufficient qualifications to complete similar tasks. In addition, the EOI should be publicized in trade magazines and international procurement databases/websites, such as “FedBizOpps”,

- Interested companies will have a four-week period to submit EOIs. At the end of this period, the EOIs will be evaluated, over a two-week period, to identify the companies to be included on a short-list of bidders. The criteria for including companies on the short-list should include the following:
  - Experience with operations, management, collections and billing in at least two regions of similar size
  - Experience doing business in Africa
  - Qualifications and expertise of proposed project director and core team
- The Terms of Reference (TOR) for the management contract will be finalized while the EOIs are being received. At the same time, it will be necessary to put together a data room for the bidders. The data room will contain operating information on the DisCos that the bidders will need in order to formulate their bids. It should contain all available information on the distribution system including, consumption, system losses, customer information (meter data, billings, collections), description of the proposed market structure for Nigeria, including the role of the Market Operator and the market rules, as well as any other relevant information. This information will be available to the short-listed bidders to review prior to submitting their bid. This information should be as comprehensive as possible, to minimize the risks to the bidders that they are making a bid without knowing the true state of the system. If a bidder perceives that the management contract has a high degree of risk, they will either not submit a bid, or their financial bid will be higher.
- Issue Request for Proposals: the Terms of Reference (TOR) will be sent to each of the short-listed bidders. The bidders will be given approximately 4 weeks in which to submit their bids. Any bids not submitted within the time-frame will not be evaluated. The request for proposals should include the following components:
  - Letter of invitation, inviting the short-listed companies to submit a bid, listing all companies that were short-listed
  - Information sheet for consultants comprising
    - A data sheet, summarizing the important terms and conditions of the contract and the selection methodology

    - Appendices, outlining any special terms and conditions, such as scope of financial terms for the contract
  - Form of technical proposal (e.g., firms references, comments on the TOR, description of methodology, team composition, CVs, time schedule for personnel and individual activities)
  - Form of financial proposal
  - Terms of reference
  - Contract terms and conditions (if available)
- Make DisCo operating data available to bidders: the bidders will have questions regarding the current state of the distribution systems as well as the proposed restructuring plan for the industry. BPE should make available to the bidders the contents of the data room containing recent reports on the state of the system and reports outlining the proposed restructuring of the industry. Bidders will be able to review the documents at the data-room site. In addition, the bidders may want to carry out on-site due diligence of the DisCos, by visiting the facilities. The BPE should assist with arranging such visits.
- Bidder Information Session: It is likely that bidders will have questions regarding the TOR, etc. We recommend that BPE should organize a one-day bidder information session, for the bidders to ask any relevant questions. This should take place in the middle of the bidding period, to give the bidders the opportunity to update their bids based on any additional information provided in the bidder information session.
- Evaluation of bids: the bid evaluation team will have three weeks to evaluate the bids and identify the winning bidder. Information relating to the examination, clarification, evaluation, and comparison of bids, and recommendations for the award of a contract, should not be disclosed to bidders or any other persons not officially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the evaluation team's processing of bids or award decisions may result in the rejection of the bidder's bid. To assist in the examination, evaluation, and comparison of bids, the evaluation team may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response should be in writing, but no change in the price or substance of the bid should be sought, offered, or permitted.
- Contract negotiation/award: the winning bidder will be notified within four weeks of the date for submitting the bid. They will then have a two week period to complete contract negotiations.

3.3 TENDERING SCHEDULE AND BUDGET

The timeline for the tendering process is shown in Figure 3. The overall timeframe for completing the selection process should take approximately 4 months from the decision to award management contracts, and initial publication of the EOI, to the end of the contract negotiation process.

It is important that the tendering process is carried out in a timely manner that balances the needs of the bidders for time to submit proposals and time for the bid evaluation team to evaluate them. The time between submission of proposals and evaluation and contract negotiations should be minimized to ensure that any prices quoted will remain valid and the bidders maintain their resource availability.

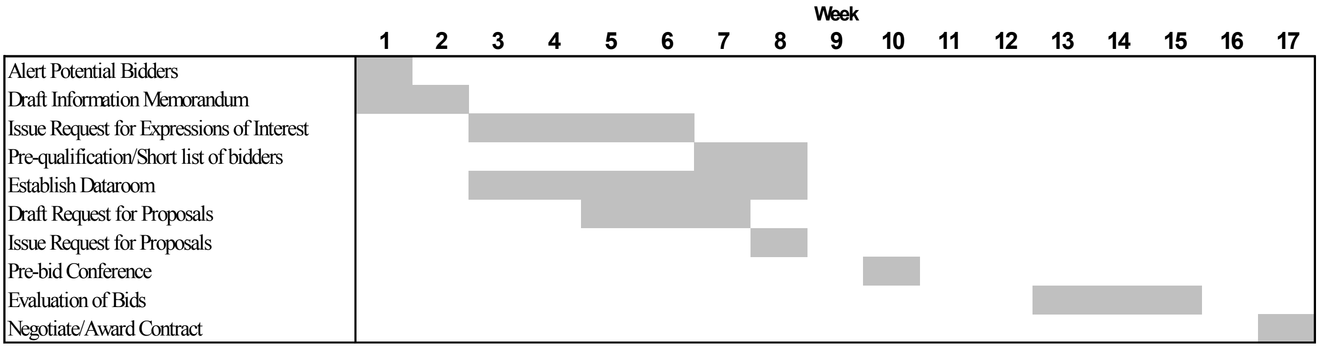

Figure 3: Timeline for Tendering Process

3.4 BID EVALUATION METHODOLOGY

The objective of the bid evaluation methodology is to identify the best overall bid, based on both the technical capability of the bidder and the financial bid. The bid evaluation process should ensure that the best overall bid is selected and that no bid that fails to meet a minimum technical threshold is selected, irrespective of the price offered. To meet those objectives, we recommend the following bid evaluation methodology. This mirrors the World Bank two stage bid evaluation process:

First, the technical bids will be evaluated. We propose that the technical component of the bids will be evaluated according to the following weightings:

- Approach and methodology - 30%
- Qualifications of key staff – 50%
- Firm experience in similar assignments – 20%

To ensure that the winning bidder is technically capable of providing the management services under the contract, bidders should score at least 75% of the maximum points on the technical evaluation, in order to be included in the evaluation of the financial proposals.

For those bidders who scored at least 75% on the technical evaluation, their financial bids will then be evaluated. It is important to note that the financial bids should not be opened until after the technical bids have been evaluated to prevent the financial bids having any influence on the outcome of the technical evaluation.

The financial bids should be scored as follows:

Financial Score for Bidder A = (Lowest Bid Price / Bidder A's bid price) x 100

This means that the lowest priced bidder will score the maximum points available for the financial component of the bid. All other bidders will score proportionately lower.

The final score for each bidder will be the weighted average of their technical and financial bids. The winning bidder will be the company with the overall highest score for the combined technical and financial evaluation. We recommend that the combined score be calculated with the technical component receiving a weighting of 75% and the financial component receiving a weighting of 25%.

3.5 NEGOTIATIONS

BPE/NEPA should enter into negotiations with the highest ranked bidder. Prior to entering negotiations, BPE will need to draft a standard consulting services contract covering the services to be provided by the contractor.

This standard consulting services contract will cover such issues as:

- Contract conditions
  - Applicable law
  - Documents forming the contract
  - Settlement of disputes
- Assignment of Responsibilities
  - Scope of works and services
  - Beginning and end dates of contract
  - Contractor’s responsibilities
  - Subcontracting
  - BPE’s, NEPA’s responsibilities
  - Treatment of confidential information
  - Terms under which the contract can be extended or terminated
  - Inspection of operating standards
- Execution of Services
  - Staffing
  - Work Program
  - Environmental and safety requirements
  - Emergency works
- Allocation of Risks

  - NEPA's risks
  - Contractor's risks
  - Insurance
  - Unforeseen conditions
  - Changes in laws or regulations
  - Force Majeure
- Guarantees and liabilities
  - Performance guarantee and liability
  - Limitation of liability
- Payment terms and conditions
  - Fixed fee
  - Performance fee
  - Contractor obligation to measure operating performance
  - Independent audit of performance standards
  - Payment terms – billing mode
  - Currency
  - Taxes and duties
- Remedies
  - Suspension of contract
  - Termination

Section 4 Sample Terms of Reference For Management Contracts

4.1 INTRODUCTION

The Government of Nigeria (GON) intends to retain the services of an electric utility management service provider under a Management Contract to improve the technical and commercial operations and financial management of the [name] DisCo. These Terms of Reference describe the tasks to be performed by the management services provider. The GON, as the sole shareholder in [name] Disco, expects the management services provider to bring immediate improvements to both the financial and commercial operational performance of the DisCo and contribute to pre-privatization activities.

In view of the key role that the electric utility sector plays in the economy of Nigeria, the Government, through the BPE, has already begun the process of transformation of the electricity sector, with the intention of transferring the responsibility for the provision of electricity to the private sector, while reserving policy-making, regulatory and strategic planning functions for the Government. The objectives of the reform program are identified as the following:

- To ensure a system of generation, transmission, distribution and marketing that is efficient, safe, affordable and cost effective throughout the country;
- In the long-term, to provide universal access to electricity, either on-grid or off-grid
- To ensure that the electricity supply is made more reliable, economically efficient and equitable so as to effectively support the socio-economic development of the country
- Ensure that the power sector attracts private investment from Nigeria and overseas
- To ensure the minimum adverse environmental impact

4.2 BACKGROUND TO THE POWER SECTOR

The Nigerian power sector is presently managed by the National Electric Power Authority (NEPA) as an integrated utility with generation, transmission and distribution within the same organization. The national electricity grid presently consists of nine generating stations (3 hydro and 6 thermal) with a total installed generating capacity of 5906MW. The Transmission network is made up of 5000km of 330KV lines, 6000km of 132KV lines, 23 of 330/132KV sub-stations and 91 of 132/33KV substations. The Distribution sector is comprised of 23,753km of 33kv lines, 19,226km of 11kv lines, 679 of 33/11kv sub-station. There are also 1790 distribution transformers and 680 injection substations.

Although the installed capacity of the existing power stations is 5906MW the maximum load ever recorded was 4,000MW. Presently many of the generating units have broken down due to limited available resources to carry out the needed level of maintenance. The transmission lines are radial and are overloaded. The switchgears are obsolete while power transformers have not been maintained for along time. The distribution sub-sector is in dire need of upgrading as many of its distribution transformers are overloaded while the lines look more like “Cobwebs”. Overall transmission and distribution losses are in the range of 30 – 40%. The electricity network has been characterized by constant system collapses as a result of low generating capacity by the few generating stations presently in service. The present installed generating capacity in Nigeria is around 6000MW and NEPA has only been able to generate a maximum of 4000MW. For a country of more than 120 million people, this indeed is grossly inadequate to meet the consumers' electricity demand. The current projected capacity that needs to be into the system is estimated at 10,000 MW. It is hoped that these would come in through Independent Power Producers (IPPs) as soon as a liberalized Electricity Supply Industry is established in Nigeria. In addition, massive injection of funds is needed to expand the distribution and transmission networks to adequately transport the electricity generated to consumers.

NEPA has problems with overstaffing, inadequate commercial orientation and corruption. Energy losses are high, at 30-35% between generation and billing, and tariff collection is poor. Only 80% of customers pay, which means that payments cover only just over 50% of the electricity generated. Consequently, the company is heavily dependent on fuel subsidies and cannot fund capital projects.

According to the World Bank, federal government support for NEPA amounted to around US$400m in 2000, around 7% of total government expenditure. However, government subsidies have diminished significantly by 2003.

NEPA has initiated the process of unbundling generation, transmission and distribution to establish commercially oriented New Business Units (NBUs). The NBUs will be empowered as independent profit centers at the same time that the corporate headquarters and the sector organizations in Abuja will be reconstituted as the Initial Holding Company (IHC).

The new NBUs that will be formed include:

- TransysCo – the transmission company, which will include transmission, system operations and the Market Operator Function;
- Up to eleven new Distribution Companies (DisCos);
- GenCos – the generation sector will be split into six GenCos consisting of one company for each of the four thermal stations and two hydro companies.
- Central services such as HR, treasury, procurement, security and industrial relations will initially reside in the Independent Holding Company (IHC), but these will increasingly devolve to the new NBUs.

The re-organization plan aims to improve the operations of the sector in the near term by strengthening management capability at the local level and de-emphasizing command and control from headquarters in Abuja. Despite the difficult issues that must be addressed to restructure the company quickly in the wake of years of under-funding and mismanagement of the power sector, there is significant potential to improve the performance in the near term by enhancing local capabilities and responsibilities. International experience shows that utility companies, in particular distribution companies are best managed at the regional level, close to the customers rather than in one centralized location, especially for a country as large as Nigeria.

NEPA/BPA are now setting up a transitional set of market rules defining the commercial relationships between the GenCos, TransysCo, the DisCos, the Market Operator and NEPA HQ. A Market Operator will be responsible for administering the market rules and the system of charges and cash payments to each of the new companies. They will administer 1) the meter data collection and reporting systems for power flows from GenCos to DisCos via TransysCo; and 2) financial transactions between the NBUs.

Funds are collected from end-use customers by the DisCos and transferred to the Market Operator, who in turn makes cash payments to all the NBUs, HQ and the trading Licensee for IPP purchases, based on the agreed cash allocation methodology. The cash allocation mechanism rations the available cash to the NBUs based on a transparent process for budget prioritization. In the foreseeable future, a significant cash shortfall relative to cost-of-service is predicted; therefore cash will have to be allocated amongst the NBUs based on need.

The existing Distribution Zones will be elevated to DisCo status and take over the executive management responsibility for the regional distribution service territories. The Districts and Undertakings will remain as operating units reporting to the DisCo headquarters.

Functional independence for the DisCos will involve creating several new positions, changing some existing positions to reflect broader job descriptions and changing some reporting relationships. The DisCo HQ will be responsible for executive management and provision of central services to the Districts, such as corporate planning, technical planning and construction, protection, metering programs, personnel and administration, procurement and legal services. Districts and Undertakings will remain semi-autonomous operating units responsible for day-to-day management of local operations. The following management positions at DisCo HQ will have expanded responsibilities:

- The MD/CE of the DisCo will have executive management authority, similar to the CEO of an independent company
- The Directors reporting to the MD will have expanded executive management responsibilities for their line organizations.
- The Finance Director at DisCo HQ will have expanded responsibilities similar to the Chief Financial Officer of a stand-alone company.

The rationale for this assignment is to improve the operations of the DisCo to prepare it for commercial operations and ultimately private sector investment.

4.2.1 Activities to be carried out by the consultants

The Government has determined that that the participation of the Management Services Consultants would be in the form of a “performance based” management contract for a period of thirty-six (36) months. The Government will retain flexibility regarding the duration of this Management Services Contract; that is allowing the extension of up to one year should that be necessary.

Under the terms of this Management Services Contract, the BPE will hire a team from a single utility management service provider under a contract with effective incentives based on measurable performance targets. The following activities will be required of the consultants:

- Day-to-day operations of the distribution system
- Implementation of an investment plan to improve the operations of the system

- Development of a business plan for the utility to position it for private sector investment

Performance targets will be prepared for the following critical areas:

- Revenue collections
- Other (if necessary)

4.2.2 Sources of financing for the project

The funds for the consultant's compensation will come from the DisCo revenues and the NEPA budget allocation process.

4.2.3 Supervision arrangements

The Consultants will report to the NEPA Managing Director. The Consultants will be required to make quarterly reports to the Managing Director, covering the financial and operational status of the utility. In addition, they will be required to make additional reports on selected topics, as outlined in Section 4.7.

4.3 OBJECTIVES OF THE ASSIGNMENT

The objectives of this assignment are

- To take complete charge and manage all aspects of the operations, maintenance and expansion of [name] DisCo for a period of 36 months by applying commercial electric utility management principles to improve the DisCos financial, commercial and technical performance;
- To assess and implement from available funds the distribution system enhancements and metering requirements to improve technical and commercial performance; and
- To assist in the pre-privatization transition activities of [name] DisCo corporate restructuring by (1) participating in the review of reports prepared by corporate restructuring consultants; (2) ensuring the availability of reliable information to the corporate restructuring consultants as well as to the privatization transaction advisors for NEPA assets;
- To provide knowledge transfer of international best practices with respect to distribution utility operations to the staff and management of the DisCo,

4.4 SCOPE OF WORK

This section provides information describing the specific professional services to be provided by the Consultants. This Scope of Services applies to all designated electrical facilities and systems under the auspices of [name] DisCo.

The scope of services to be performed by the Consultant, as given below is indicative and not necessarily exhaustive. The Consultant is expected to provide all the services necessary for the efficient operation and dynamic management of [name] DisCo in a commercially responsible manner.

4.4.1 Safe operation of the facilities

During the first three months of the contract period, the Consultants shall conduct a physical inspection of the facilities and equipment, to identify deficiencies related to the safety of their operation and their security.

The Consultants shall prepare a report to the NEPA Managing Director outlining safety deficiencies and recommending a plan to correct the safety deficiencies (the “Safety and Security Plan”) by the end of the sixth month of the contract period.

The consultants shall ensure that round the clock security systems are in place to protect substations and key facilities and IT equipment from trespassers and vandals.

4.4.2 Maintenance of Power System Operations

To ensure continued operation of the distribution system and operating equipment, the Consultants will, within two months of the start of the contract:

- Identify the immediate need for equipment repair and direct and supervise the making of such repairs at all substations, switchgear, transformers, connectors and auxiliary or other equipment included in the electrical transmission systems, which are necessary to operate an efficient distribution network
- Identify the critical and necessary spare parts, materials and equipment, oversee procurement of such materials and equipment in sufficient quantity and establish an inventory system for storage and replacement of maintenance materials.

By the end of the second quarter of the contract period, the Consultants shall develop a preventative maintenance program (the “Preventative Maintenance Program”) and submit it to the NEPA Managing Director of Directors for review and approval. Upon the Managing Director’s approval, the Consultants will oversee the implementation of the Preventative Maintenance Program.

The Preventative Maintenance Program shall include:

- A schedule and system to maintain key facilities and equipment
- A vehicle and equipment repair and maintenance record system; and a system to plan, schedule and carry out routine maintenance activities

4.4.3 Improve efficiency of Distribution System Operations

The Consultants, as part of this Management Service Contract, will be required to improve the efficiency of the distribution system operations. To improve the efficiency of the distribution system and operating equipment, the Consultants will:

- Develop and implement a computerized materials and maintenance management system and train the DisCo employees on the use of the system
- Develop, supervise and direct the implementation of a transparent procurement system
- Develop and establish a preventative maintenance program (see Section 4.4.2) and train the employees

- Review the existing Emergency Operations Plan, and if adequate train employees and conduct training drills for the implementation of emergency actions. If the Consultants determine that the current Emergency Operations Plan is not adequate, the Consultants will develop a new comprehensive Emergency Operations Plan, with associated cost estimates. This Emergency Operations Plan will be given to the NEPA Managing Director for approval
- Identify the need for administrative and technical support facilities and equipment, e.g., vehicles, communications systems, repair tools and equipment, and facilities for offices, warehousing and repair.
- Identify the activities necessary to effect significant reductions in the cost of distribution and implement those activities as necessary.

4.4.4 Financial management

The Consultants will:

- Assume control of cash, receivables, payables and budgets for the DisCo. They will maintain accounting and other records and control the financial flows of the DisCo.
- They will manage the cash transfer process between the Market Operator and the DisCo, including the monthly and quarterly transfers.
- Manage the budgets for DisCo operations
- Compile and maintain operations, maintenance and financial records
- At least quarterly, meet with the NEPA MD and/or the BPE to review reports on operations, financial performance and key programs specified in the contract

4.4.5 Improve Revenue Management Systems

One of the objectives of the Management Service Contract is to improve the systems for revenue management of the DisCo. During the first three months of the contract, the Consultants will conduct an assessment of the revenue collection procedures currently in place and evaluate the problems and the approaches that could be developed to significantly reduce financial losses. The Consultant will:

- Develop policies and procedures for the revenue collection department
- Develop a plan to promote the revenue collection activities to customers

The Consultant will also establish a customer database to identify each customer by category. This database will be used by the Consultant to support its strategy for reducing commercial losses, identifying targets for reducing theft and increasing collection. The database should include, among other information:

- The type of connection and meter installation
- Consumption level
- Ownership (whether the customer is a state-owned company or not)
- Creditor/debtor status
- Region

- Other pertinent information

The customer database will be complemented by a strategy to achieve an increase in collections and a reduction in power theft by customer category. Monthly targets fro loss reduction and quarterly targets for collections for each customer category will be defined for the duration of the contract. Priority should be given to those customer categories with expected high returns. In addition the consultant will:

- Develop, direct and supervise programs to reduce technical and commercial losses in the distribution systems
- Develop, direct and supervise a meter calibration, repair and replacement program starting with the master meters at the points of connection with the transmission system and adjoining distribution systems
- Identify illegal connections and quantify the flows; develop, supervise and direct a program to convert these illegal connections to legal service
- Develop, supervise and direct a program to update the database of connections and to classify the actual use in accordance with current tariff definitions
- Develop, supervise and direct the installation of computerized administrative and accounting systems consistent with NEPA corporate restructuring and train employees to use these systems
- Identify improved methods for communicating information between district offices and DisCo HQ

4.4.6 Annual Operating Investment Plan

The Consultants shall identify the annual investment required to achieve the targeted increase in collections, reduction in losses, reduction in system costs and improvement in the reliability and quality of the power supply for the DisCo service territory.

The Consultants will also identify any other investment that would have a positive impact on the technical or financial performance of the company. The Consultants will prepare and submit a draft investment plan “(Annual Operating Investment Plan”) for review and comment by the NEPA Managing Director, no later than six months after the start of the contract. The level of funds available for investments for each DisCo will be determined by the NEPA budget allocation procedure, managed by the Market Implementation Committee.

4.4.7 Strategic business development plan

The Consultant shall, within 12 months of the start of the contract, submit to the NEPA Managing Director/BPE a strategic business plan for the DisCo, for their review and approval. The Strategic Business Plan will outline the future activities of the DisCo,

4.4.8 Staff development and training

Within two months of the start of the contract, the Consultants shall submit a comprehensive Staffing Plan to the NEPA Managing Director for their review and approval. The Staffing Plan shall recommend improvements to the management, organization and supervision f the existing staff.

Within three months of the start of the contract, the Consultants shall prepare and submit to the NEPA Managing Director, a training and development program for Management and Staff, for review and approval.

The Consultants shall implement the approved training and development program and shall update and monitor the program on an ongoing basis.

4.4.9 Organization and staffing

Figure 1 shows the proposed top level organigram for [name] DisCo. The three full-time positions allocated to the management contractor are shown shaded.

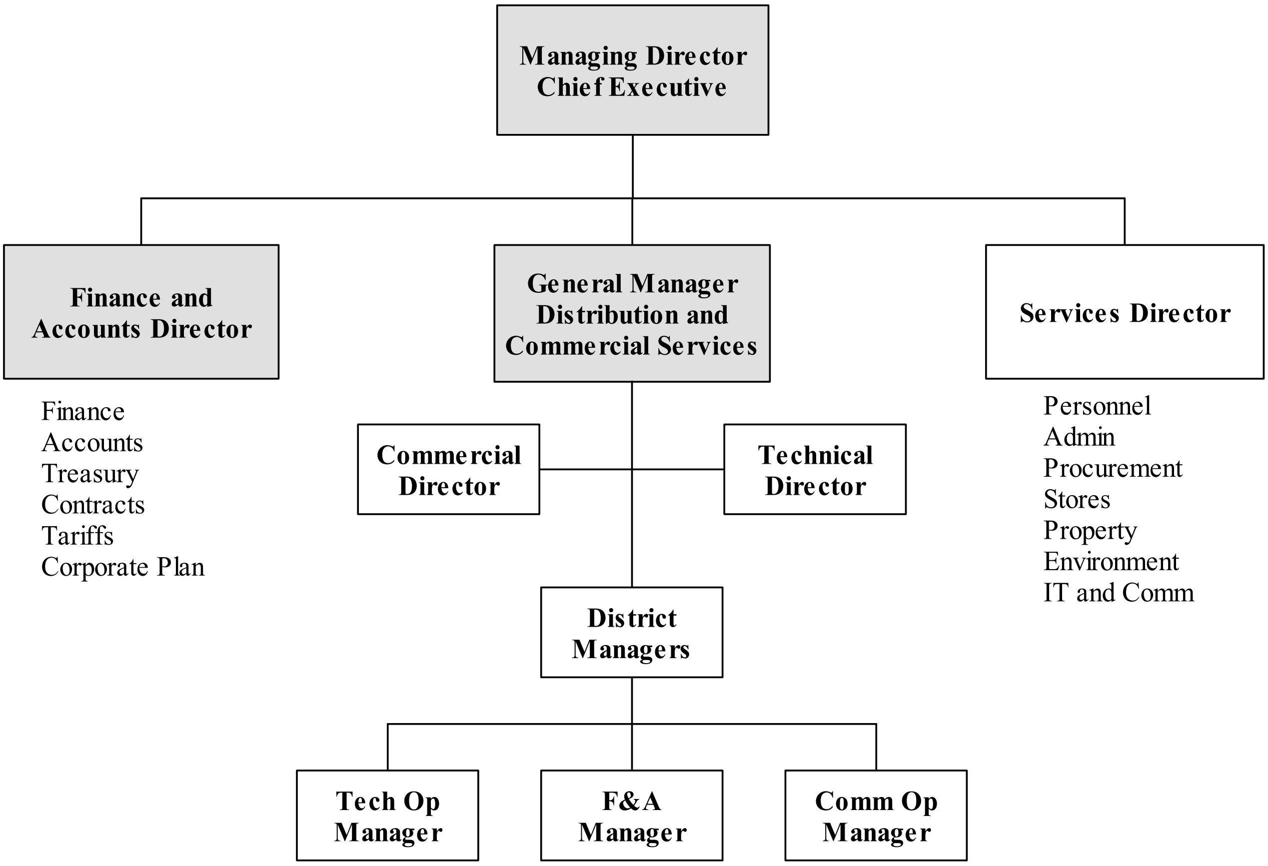

Figure 1: Top Level Organigram for DisCo

The contractor will be required to fill the following three key positions:

- Managing Director
- General Manager, Distribution and Commercial Services
- Finance and Accounts Director

The contractor will be responsible for the management of the DisCo at the Zonal Headquarters level. District managers will report directly to the contractor. The contractor also will train NEPA incumbent staff for these positions who will remain as shadow staff members to ensure knowledge transfer from the contractor to the DisCo staff, one of the key objectives of the management contract.

The contractor's personnel shall provide all management, accounting, systems, financial, technical, operations and maintenance expertise necessary to perform the services outlined in this Terms Of Reference. The Consultants shall provide qualified key management staff that demonstrate prior experience in managing an electric utility to meet the responsibilities of each position listed below. The following position descriptions show the essential duties of the contractor personnel.

4.4.9.1 Managing Director/Chief Executive

The Managing Director will be responsible for the overall management of the DisCo. He will be the primary point of contact with NEPA HQ, and will make quarterly reports to the NEPA Managing Director on the status of the DisCo. He will coordinate all activities under the management contract and ensure efficient and reliable operations of the company. He will also oversee the financial condition of the DisCo. The Managing Director will also work with the BPE, Ministry of Power and Steel and other government entities to provide required information for legal compliance.

The Managing Director will have the following specific duties:

- Develop and implement broad mission and strategic goals for the DisCo
- Develop a strategic business plan for the DisCo
- Define and establish the annual technical and business performance objectives to meet the goals of the management contract
- Oversee activities and proper functioning of DisCo HQ, Districts
- Supervise the work of the AGM Finance, AGM Distribution and AGM Services
- Review and approve activity reports of each DisCo department as well as corporate financial performance statements, to determine progress towards attaining performance goals
- Evaluate performance of senior executives
- Provide quarterly progress reports to NEPA HQ and BPE and liaise as needed with NEPA HQ
- Lead the operational performance improvement activities at DisCo headquarters and district level offices
- Serve as a member of the DisCo board of directors, when formed

4.4.9.2 Finance and Accounts Director

The Finance and Accounts Director will be responsible for overall financial management of the DisCo, reporting to the Managing Director. He will be responsible for developing a budget for the DisCo, working with the Market Operations Committee to refine the budget, monitoring revenues and expenditures. He will supervise the cash flow payments to and from the Market Operator.

The Finance and Accounts Director will have the following duties:

- Assist MD in development of strategic business plan, establishing performance and operational targets for short- and long-term.
- Supervise preparation of monthly financial statements.
- Submit monthly financial reports to GM and the Board of Directors.
- Establish and supervise cost accounting procedures and systems.
- Set up accounting policies.
- Consolidate accounts from district divisions.
- Submit quarterly revenue and capital budgets and cash flow forecasts to the Market Operator and monitor actual expenditures and receipts against budget forecasts and report variances.
- Prepare financial forecasts.
- Define and establish specific financial and accounting performance targets.
- Monitor levels of accounts receivable and put in place procedures to increase the level of collections.
- Supervise the activities of the Principal Manager Finance and Accounts and Principal Manager Contracts and Tariffs, and other direct reports.
- Manage compliance with tariff proceedings.
- Prepare corporate plan.
- Manage business information systems, accounting systems and related software.

4.4.9.3 General Manager Distribution and Commercial Services

The General Manager Distribution and Commercial Services will be responsible for managing the day-to-day operations of the distribution and marketing functions, including engineering, maintenance and construction of the facilities, metering, billing and collections. He will report to the Managing Director. He will supervise the District Managers in the field, a Technical Director at Zonal HQ and a Commercial Director at Zonal HQ.

The GM will have the following duties:

- Establish and implement requirements, procedures and performance monitoring of the District managers.
- Implement a process to improve operations to meet performance targets.
- Supervise the customer billing and collections process, and implement a process to improve the collections process.
- Establish normal Distribution operating procedures and maintenance policies.
- Establish emergency distribution system operating procedures, including procedures related to load shedding.
- Prepare plans for the reinforcement of the system to meet load growth.
- Establish procedures to improve operating efficiency and track performance targets.

- Prepare proposed projects for extension and rehabilitation of the system, including a customer metering program and obtain engineering and budget approval of the projects.
- Ensure the collection, maintenance and provision of all meter data for the Market Agreement and Charges Model is provided to the PM Contracts and Tariffs.

4.4.9.4 Other skills to be provided under short-term assistance:

In addition to the primary staff positions to be provided, the consultants should also make available as necessary staff with the following capabilities:

- Information Technology, including staff to:
  - supervise the development and maintenance of customer database
  - implement any new software applications
  - ensure computer system security and access
- Operations/Engineering, including staff to:
  - provide engineering design plans for maintenance and critical system upgrades of substations
  - Prepare load forecasts for planning purposes
  - Prepare emergency response plans for major system collapse
  - Develop and enforce safety procedures
- Human Resources

4.4.10 Duration of Assignment

The duration of this contract will be for three years. The contract may be extended for one additional year, at the request of BPE.

4.5 TRANSFER OF KNOWLEDGE

One of the objectives of this consulting contract is to transfer knowledge regarding international best practices for distribution management to the DisCo. This should occur through:

- Development of working procedures for utility operations that will be implemented by the Consultant.
- Training of DisCo staff and capacity building.

4.6 PAYMENT FOR MANAGEMENT SERVICES

Payment for the management services under this contract will be directly linked to achievements. Payment will consist of a fixed fee and a performance fee. The fixed fee will cover the major part of the consultants' expenses, and will be bid by the consultants as part of their bid for the contract. The fixed fee will be paid in 36 monthly installments.

If the contract is extended, the fixed payment will apply pro-rata to the extension period, unless otherwise agreed in writing between BPE/NEPA and the consultants.

Calculation of the performance fee will be based on the extent to which the consultants achieved the annual performance targets listed below in 4.9. The Performance Fee will be calculated based on 1) the annual percentages of each listed target that is achieved by the consultant at the end of the twelve month period.

If the consultant equals or exceeds the target in any one year, they will receive the maximum available bonus. If the performance measurement is negative (i.e., the measure for $year_n$ is less than measure for $year_{n-1}$), then the performance fee will equal zero.

The maximum Performance Fee payable each year will be [$x]. The actual performance fee in each year will equal:

Max Fee x percentage target achieved (with a maximum of 100% and a minimum of 0%)

The percentage target achieved will be calculated as

(actual performance – prior year)/(target – prior year).

4.7 LIST OF REPORTS SCHEDULE OF DELIVERABLES, PERIOD OF PERFORMANCE

The Consultants will be required to provide NEPA Managing Director with the following reports:

- Quarterly Reports – outlining the main activities for the quarter
- Annual Performance Reports – outlining the main activities completed by the consultants during the previous 12 month period, measurements of operating performance
- Staffing Plan
- Exit Condition Report – to be delivered at the end of the contract, outlining the current state of the system.
- Safety and Security Plan
- Preventative Maintenance Program
- Emergency Operations Plan
- Annual Operating Investment Plan
- Staffing Plan

4.8 DATA, LOCAL SERVICES, PERSONNEL AND FACILITIES TO BE PROVIDED

4.8.1 Data

BPE/NEPA will set up a data room to provide information to bidders on the current state of the system and the proposed restructuring of the sector. The following reports will be made available to the consultants:

4.8.2 Personnel and Facilities

The consultants will be provided with office facilities at the DisCo's headquarters. It is expected that the long-term staff members will be based on a permanent basis at the DisCos head office.

4.9 PERFORMANCE TARGETS

The Consultants will be required to meet the following performance targets, in order to receive the performance fee component of the overall contract compensation.

	Base Year	2004	2005	2006
Collections %age				

Table 1: Performance Indicators

Table 1 shows the performance indicators that the Consultant must meet in each year of the contract. The collections percentage is defined as the percentage of total revenue due to the DisCo that is actually collected and transferred to the Market Operator. It is calculated as follows:

4.9.1 Calculating the Performance Target

Collections Percentage = Revenue (Naira) / (Energy (kWh) x Tariff (Naira/kWh)).

Where: Revenue = actual cash transfers made to the Market Operator for 12 month period
Energy = actual metered energy from the TransysCo to the DisCo's service territory
Tariff = tariff for the DisCo.

The Base Year for this contract is 2003. The collections %age will be calculated on a rolling 12 month basis from the start of the contract. For example, if the contract begins in June 2004, then the 2004 performance measurement is calculated based on the collections from June 2004 to June 2005.

Each year, NEPA/BPE will calculate a performance factor, reflecting the extent to which the consultant met the stated performance targets. The actual performance fee paid will equal the performance factor x the maximum performance fee.

4.9.2 Performance Factor

Each year, the Performance Factor will be calculated to determine the extent to which the consultants met the performance targets outlined in this Terms of Reference and the expected performance fee to be paid. The actual Performance Fee paid to the consultants will be the Performance Factor x Maximum Performance Fee. The Performance Factor is the ratio of actual performance to target performance for the stated criteria. The Performance Factor will always be between 0 and 1. This means that:

- The performance fee can never be negative; in the event that performance dis-improves, the Performance fee will be 0;
- Since the Performance Factor can never exceed 1, the actual performance fee paid in any year cannot exceed the maximum performance fee, shown in Section 4.10.2. In the event that the consultants exceed the target performance

standards in any one year, the excess will be applied to meeting the target in the following year.

In Year 1 (2004), the Performance Factor is calculated as:

(Year 1 Actual %age – Base Year %age)/(Year 1 Target %age – Base Year %age)

In subsequent years (2005-6), the Performance Factor will be calculated as:

Performance Factor Year n = (Year n Actual %age – Year n-1 Target %age)/(Year n Target %age – Year n-1 Target %age)

4.9.3 Measurement of Performance Standards

The consultant will be required to report quarterly to NEPA/BPE the current collections %age, as outlined above.

In addition, BPE/NEPA will engage an independent auditor to verify the calculation of the performance targets.

4.10 FEES

The consultants will be paid a Fixed Fee and a Performance Fee for the services provided under this TOR.

4.10.1 Fixed Fee

Bidders are requested to include in the financial bid the fixed fee that they require to be paid to provide the services outlined in this terms of reference. The fixed fee should cover the cost of supplying both the long-term and short-term experts to meet the requirements of the TOR. The payment schedule for the fixed fee will be determined during contract negotiations.

4.10.2 Performance Fee

The Maximum Performance Fee will be set at $x per month of the contract. The actual performance fee paid to the consultants will be based on the performance standards achieved by the consultants, as described in Section 4.9. Performance fees will be paid annually in arrears. The actual performance fee paid in any year will be calculated as:

Actual Performance Fee = Annual Performance Factor x Maximum Performance Fee.

If the Annual Performance Factor is < 0, i.e., collections dis-improved over the year, then the Actual Performance Fee will be set to $0.

If the Annual Performance Factor is > 1, i.e., the consultant exceeded the performance target, then the Actual Performance Fee will be set equal to the Maximum Performance Fee.

Appendix A International Experience with Management Contracts

Utility management contracts of the type proposed for the newly formed DisCos have been used in other countries and in other industries with success, as part of an overall restructuring process. In this section, we highlight experience in both the electric sector (Tanzania, Lesotho and Guyana) and also in the water sector (Gaza and Jordan) where such contracts have been more widely used. The primary lessons learned from this review of international experience are:

- It is important to clearly define the roles of the contractor and the agency (utility) that is contracting for the management services. This is particularly important in the areas of staffing (who is responsible for determining staffing levels), budgets and investment programs (in particular the scope of new investments and their cost).
- It is important to clearly allocate the risks between the contracting utility/government department and the contractor. The contractor should not face risks with respect to compensation for factors that are outside of their control. Placing such risks on the contractor will discourage bidders from offering their services, or increase the cost of the management contract. Transparency by the government agency issuing the management contract is vital.
- Achievable performance targets should be set for the contractor; these targets should be measured and verified. If possible, include an independent audit of the performance targets.
- Many operating improvements require funds for new or replacement equipment. Funds for new investment should be made available to the contractor, if possible to maximize the potential for operating improvements.
- Clearly link any incentive fees and performance. The best results were seen in contracts where the contractor was paid a combination of a fixed fee and a performance based incentive fee. In addition, the level of performance fees should be stated in advance of the tendering process and not bid by the contractor.

The following sections describe in detail the experience with management contracts in four countries: Tanzania (electricity), Lesotho (electricity), Gaza (Water) and Jordan (Water). For each example, we describe the scope of the management contract, the organizational structure, the compensation paid, and where available, the performance improvements arising from the use of management contracts.

A.1 TANZANIA

TANESCO of Tanzania is a state owned, vertically integrated G, T & D electric utility with 763 MW of installed generation, a 220/132kV transmission network and 400,000 consumers.

In May 2002, the management of TANESCO was transferred to NETGroup Solutions under a management contract. The initial contract is for a two-year period up to 2004, although there is a provision for this to be extended.

The objective of the management contract is to prepare TANESCO for unbundling and privatization, which is due to take place in 2005. The contractor is aiming to return

TANESCEO to financial and technical health prior to privatization, thereby making it more attractive to potential investors.

A.1.1 Organization chart

The contractor, NETGroup Solutions, is providing four senior staff members to TANESCO as depicted in Figure A.1:

- Managing Director
- Chief Financial Officer, reporting to the Managing Director.
- Deputy Manager, Distribution and Customer Service, reporting to the Managing Director.
- Deputy Manger, Generation and Transmission, reporting to the Managing Director.

They also provided 7 part-time staff members.

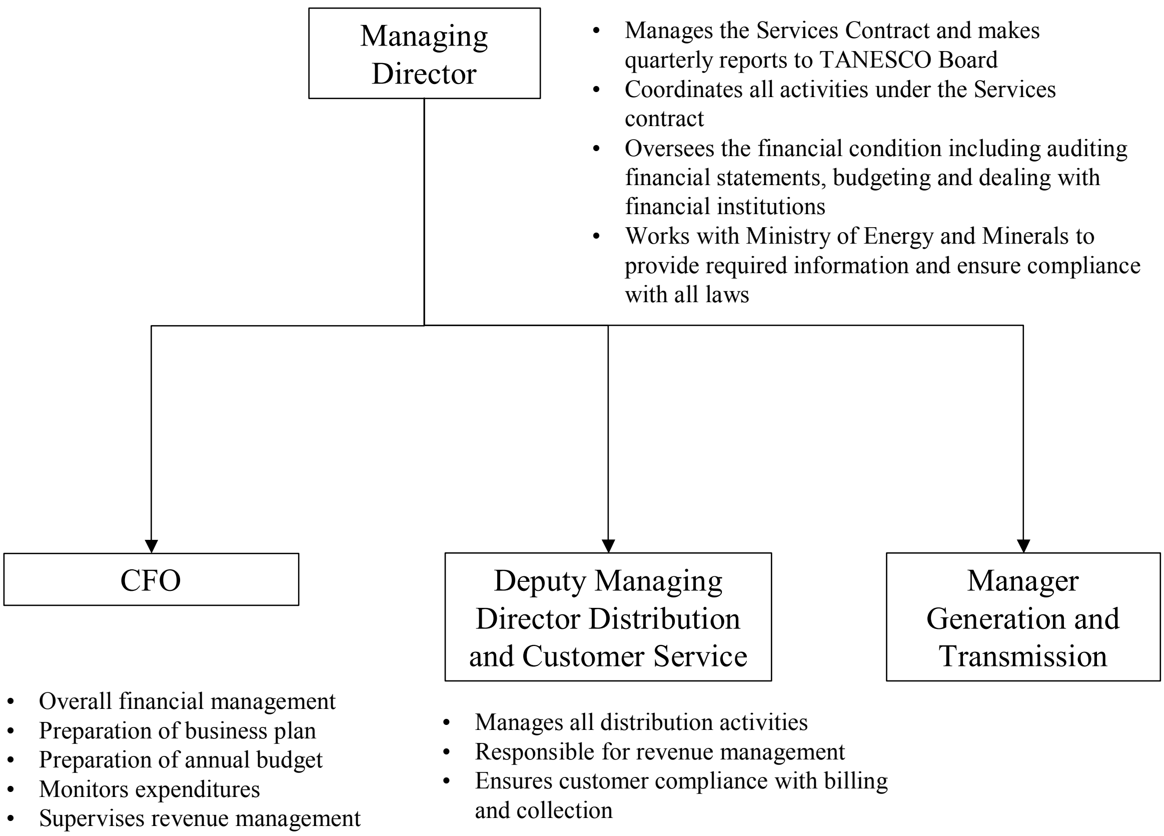

Figure A.1: Organization Chart for TANESCO Management Contract

A.1.2 Personnel roles and responsibilities

A.1.2.1 Managing Director

The responsibilities for this position include:

- Management of the services contract and make quarterly reports to the TANESCO board of Directors on the status of operations
- Coordination of all activities under the services contract and ensure efficient, reliable operations of TANESCO
- Oversee the financial condition of TANESCO, including auditing financial statements, budgeting and dealing with financial institutions
- Work with the Para-Statal Reform Committee, the Ministry of Energy and Minerals, and other government entities to provide required information and ensure compliance with all laws.

A.1.2.2 Deputy Manager, Distribution and Customer Service

The responsibilities of the Deputy Manager, Distribution and Customer Service include:

- Management of all distribution activities of TANESCO to ensure the reliable and efficient operation of substation facilities
- Responsibility for TANESCO revenue management program
- Ensures customer compliance with billing and collection
- Implementation of TANESCO's disconnection policy

A.1.2.3 Deputy Manager, Generation and Transmission

The responsibilities of the Deputy Manager Generation and Transmission include:

- Determination of power plant dispatching
- Supervision of daily, monthly, and annual load forecasts for use by dispatch operations
- Provide engineering and technical advice on dispatch operations and planning.
- Coordination of all technical issues related to generation and transmission system operations

A.1.2.4 Chief Financial Officer

The responsibilities of the CFO include:

- Reporting to the CEO
- Responsibility for overall financial management
- Preparation of a business plan for the operation of the company
- Preparation of annual budget, monitor expenses and report variances to the CEO
- Supervision of revenue management at TANESCO
- Oversee all relations with the banks and financial community.

A.1.2.5 Approach to tendering

The tendering for the TANESCO contract was done using the World Bank's two-stage procurement procedures incorporating both a technical and financial evaluation of the bids. The procurement process was managed by the Ministry of Energy and Minerals (MEM), and it was implemented by the Para-Statal Reform Commission (PSRC). The PSRC put together a Technical Evaluation Team comprising members of:

- President's office of planning and privatization
- Ministry of Energy and Minerals
- Ministry of Finance
- Attorney General's Chambers; and
- PSRC

The PSRC developed an RFP for the management services contract, which was approved by the MEM. The RFP covered the following:

- Scope of services, including:
  - Preparation of data reports
  - Performance benchmarking
  - Improvement in revenue management system
  - Operation and maintenance programs
  - Financial Management
  - Development of strategic business plan
- Key management staff to be provided by contracting firm
- Payment scheme
- Description of incentive compensation scheme and performance targets

Eleven companies from South Africa, Sweden, Ireland, US, Spain and Finland submitted expressions of interest. The Technical Evaluation Team short-listed six firms to submit a full proposal, of which three actually submitted a proposal.[1] The bids included separate technical and financial components. The technical proposals were to be opened first and only those firms that scored over 80/100 would have their financial proposals evaluated. The Technical Evaluation Team recommended disqualification of the technical proposals by two of the bidders, for various reasons, and the acceptance of the technical proposal from NetGroup Solutions.

The financial proposal was subsequently opened. The financial and technical proposals were approved by the joint meeting of the MEM, the members of Tanesco Board of Directors and the PSRC.

[1] Some firms did not bid as the company that was awarded the management services contract would not be allowed to bid during the privatization stage.

A.1.2.6 Compensation

The compensation for the contract is in the form of a retainer fee and a success fee. The retainer was $2.6m USD for the two years of the contract. This fixed fee was paid by the Swedish International Development Agency (SIDA), and was not paid for out of the utility revenues. The success, or performance, fee is indexed to the consultant's performance and is calculated based on the percentage reduction in losses and percentage increase in collections for TANESCO.

The maximum value of the performance fee was fixed in advance and set at:

- $3000 per month for targets related to reducing losses
- $10,000 per month for targets related to reducing operating costs

The success fee was monitored by SIDA, and it was possible for the success fee to be negative if performance actually declined.

A.1.2.7 Performance incentives

The contract provides for performance incentives in two areas: reduction in system losses and improvement in operating efficiency, as calculated by the ratio of total operating costs to total revenue collected.

The full payment of the operating efficiency portion of the success fee is conditional on the consultant meeting minimum performance levels for quality of service and supply, covering such factors as:

- Quotation to customers
- Providing supply
- Frequency of meter readings
- Penalties for non-payment of bills
- Account queries
- Reconnection of pre-payment meters
- Customer complaints
- Customer enquiries

A.1.2.8 Span of control

The contract allows the management company to take complete charge of TANESCO, and manage all aspects of the operations, maintenance and expansion of the utility for a 24 month period, with the option of extending the contract for a third year.

The management company has full financial control of TANESCO, including cash, receivables, payables, budget and new investments from available funds. The management company is also responsible for all management, accounting, financial, technical, operations and maintenance expertise to operate TANESCO. They provide four key staff that have executive management responsibility for TANESCO's existing staff complement. The contractor is permitted to fire staff, and some non-performing staff have been dismissed.

A.1.2.9 Results achieved

The results up to July 2003 were as follows:

- Payment collections. Non-payment by customers has reduced significantly. Prior to the contract, 67% of customers were paying their bills on time. After two years of the contract, 94% of customers were paying on time. The value of payment collections increased by 45%, from TShs11 bn/month to 16 bn/month.

- Cost control – Operating costs declined by 16%, from TShs9.5 bn/month to 8 bn/month

- Some improved reliability, better customer service and quality of supply

Some problems that still remain unresolved include:

- Losses, which fell slightly from 28% to 21%. Non-technical losses are on an upwards trend

- Problems with implementing staff reductions for non-performing people. Payroll costs remain high.

A.2 LESOTHO

In February 2001, Lesotho Electricity Corporation (LEC) hired SAD-ELEC, a South African company, to manage the LEC for a period of 18 months (Feb 2001 – Jul 2002). The contract was subsequently extended for a further year, to July 2003. This activity took place as part of the World Bank financed project – Lesotho Utilities Reform Project. Under this activity, the Government of Lesotho and the World Bank an Interim Management Task Force (IMTF) to prepare LEC for privatization. The main objectives of the IMTF were to improve the commercial, financial and technical performance of the LEC, while also connecting new customers and carrying out specific studies to serve as input for the preparation of the privatization process.

A.2.1 Organization Chart

SAD-ELEC provided personnel to fill five positions at LEC as shown in Figure A.2:

- Managing Director – responsible for overall management of LEC, internal audits and legal services
- Deputy Managing Director – Finance – responsible for treasury functions, financial accounting, financial planning and budgeting.
- Deputy Managing Director – Engineering – responsible for planning, projects, operations, transmission and maintenance
- Deputy Managing Director – Commercial – responsible for customer services, marketing and metering
- Deputy Managing Director – Human Resources – responsible for personnel administration, training and development, HR planning and industrial relations.

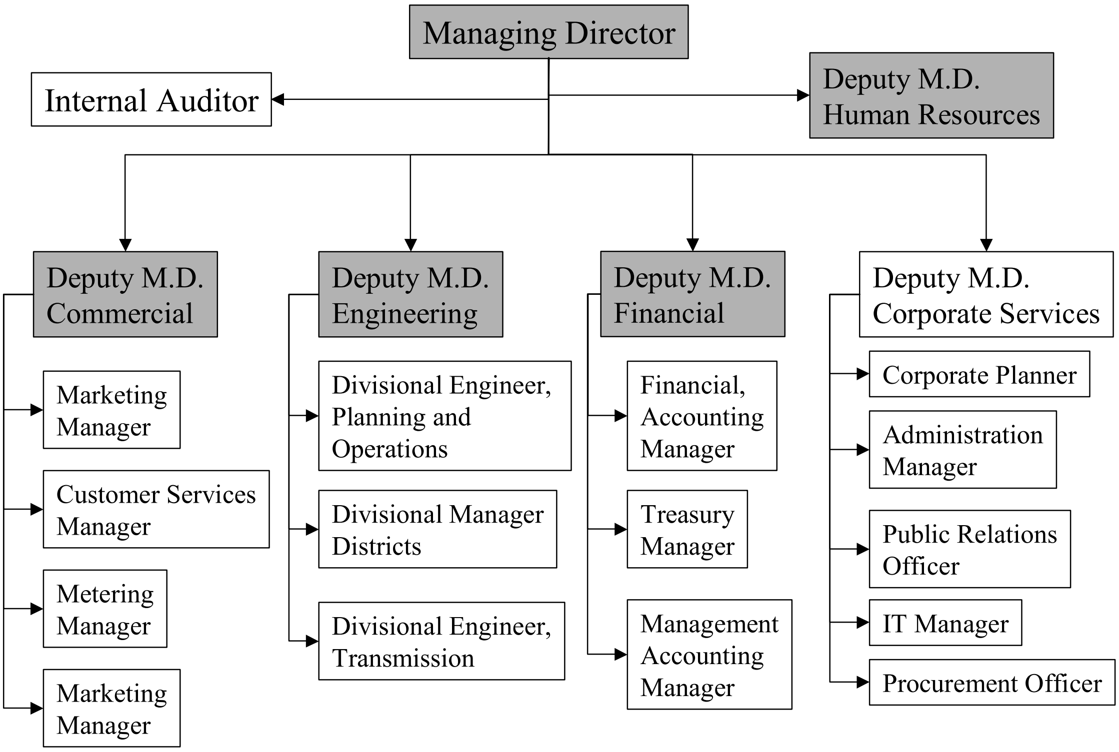

Figure A.2: Organization Chart for Lesotho Electric Company Management Contract

A.2.2 Compensation

For the first 18-month contract, the consultants were paid a fixed fee of $2.5m USD, and a further $0.5m USD for the additional year of the contract. The number of staff provided by SAD-ELEC was reduced for the extension of the contract.

A.3 GUYANA POWER AND LIGHT

A management contract was implemented in Guyana, as part of an overall restructuring of the electricity company. In 1999, the Government of Guyana signed an agreement with AC Power, to take a 50% stake in Guyana Power and Light. The Government of Guyana retained the remaining 50% stake. A 10 year management contract for the operation of Guyana Power and Light (GPL) was also part of the agreement. AC Power is a joint venture, 80% owned by Commonwealth Development Corporation and 20% owned by ESB International. CDC provided the financing for the investments, and ESBI was responsible for the management of the utility.

Unlike the other examples of management contracts discussed above, this contract involved the management of an integrated utility, covering generation, transmission and distribution.

The management contracted required AC Power to provide an efficient service at economic cost with clearly defined operating standards and performance targets, in addition to implementing the development and expansion programs included in GPL's five year business plan. In addition, AC Power was to be responsible for raising funds from private placements and debt financing. The funds raised by AC Power were intended to finance the refurbishment of GPL's transmission and distribution facilities (with expenditure of US$10m per annum for five years), and to introduce reliable billing collection services to substantially reduce commercial losses caused by the widespread theft of electricity and inefficient collections. AC Power is entitled to earn of up to 23% on the equity that they put into the business.

A.3.1 Fees

The contractor was paid US$3.5 million per annum for the first four years of the management contract, and US$2.5 million per annum for the remaining six years. This fee was to be financed from GPL's revenue streams. The management fee was set to cover the costs of up to 14 expatriate staff supplied to GPL, as well as ongoing access to technical and administrative expertise of ESBI.

A.3.2 Performance Targets and Results

Performance targets were established for the contract with respect to reducing line losses. Technical and commercial losses were 40% combined prior to the start of the contract. The target was to reduce total losses to 34% at the end of year 1, 29% at the end of year 2 and 24% by the end of year 3. The results were not impressive. After one year, the loss figure was 39.3% and for the first nine months of year two the figure was 39%. By 2003, they had increased to over 40%

AC Power did not raise the required funding to finance new investments, and did not implement a new billing collection system, contributing to the poor performance.

In spite of tariff increases, GPL by 2003 was operating at a cash flow loss of USD$0.6m per month, in part due to high levels of losses. A 60% increase in fuel costs also contributed to the financial problems.

A.4 GAZA WATER AND SANITATION SERVICES

In 1996, Lyonnaise des Eaux/Khatib and Alami (LEKA) was awarded a four-year water services management contract to help local government service providers and the Palestinian Water Authority improve water service. The overall objectives for the management contract were to improve the quality of water supplied and treated wastewater, to improve the management of water and wastewater services and to promote the appropriate institutional set-up for provision of these services.

A.4.1 Organizational Structure

Unlike other examples of management contracts, in this case the contractor did not have direct operational control over the day-to-day operations of the water service provider. In Gaza, the water and wastewater services are provided by individual municipalities. The contractor liased directly with the individual municipalities who in turn were responsible for the actual operation of the services and implementation of directives from the contractor, as shown in Figure A.3 below.

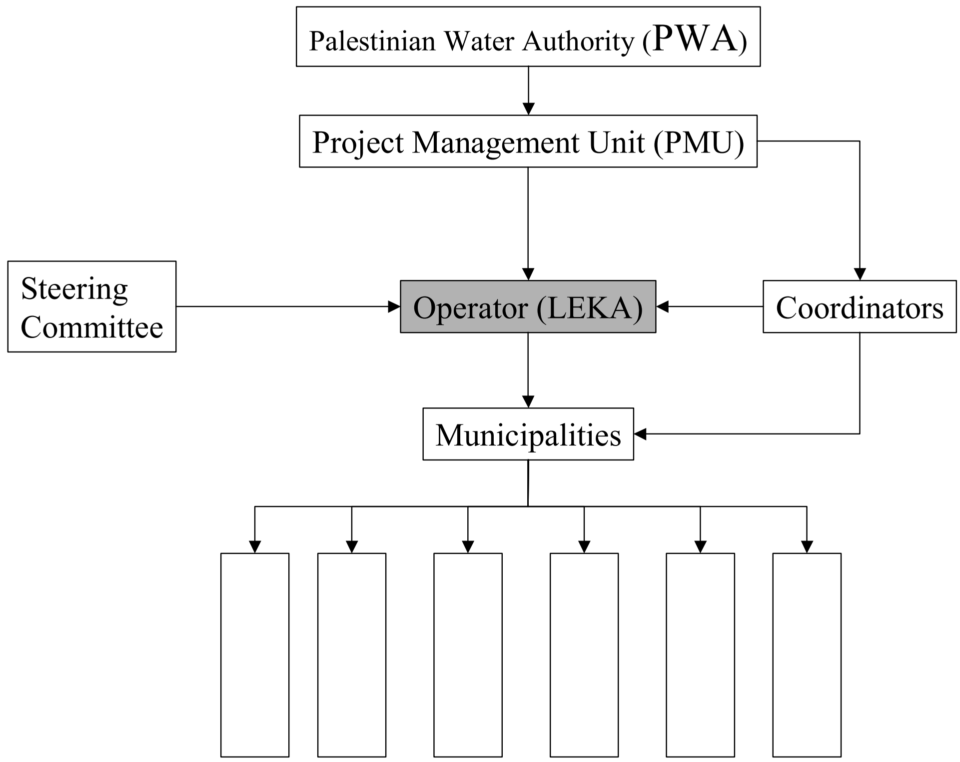

Figure A.3: Organizational Structure Gaza Water Managment Contract

A.4.2 Approach to tendering

The tendering process was carried out in accordance with the World Bank guidelines for two-stage bidding. 52 companies submitted expressions of interest. 8 companies were short-listed and of those, 6 companies submitted proposals. Technical proposals were evaluated first. For those that achieved a minimum technical score, their financial proposals were then evaluated. The winner was a consortium composed of Lyonaise des Eaux and Khatib and Alami (LEKA). The duration of the contract was initially 4 years (1996-2000) and it was extended until Sept 2003.

A.4.3 Compensation

The contract fee is split between a fixed annual payment, paid monthly and an additional performance fee, based on the achievement of specified performance targets. The performance fee is paid annual, based on the extent to which the operator achieved the designated performance levels.

In their financial proposals, the bidders indicated the fixed fee that they want to be paid for providing the services under the contract. The operator is paid this fixed fee monthly, adjusted for inflation. The total value of the fixed fee for the four years of the contract is $6m USD. This fixed fee was financed by the World Bank.

In addition, the contractor is paid a performance fee, based on the extent to which they met specific performance targets. The maximum total incentive payment for four years is $3m USD (or a cap of $750,000 per year). This was fixed for all bidders.

A.4.4 Performance incentives

The performance fee is calculated based on the contractor's performance against 31 performance targets, based on the objectives of the contract. All performance targets are weighted to reflect the priority of the target, with critical targets given a much higher weighting.

Independent auditors (Deloitte & Touche) are used to verify performance targets. At the end of each contract year, the auditor reviews the performance reports of the operator, confirms their accuracy by visiting sites and examining records, and verifies the performance score. The incentive payment is then calculated on the basis of this performance score.

A.4.5 Span of control

The contractor was responsible for the oversight of the municipalities that were directly responsible for the provision of the services. They did not, however, have the authority to instruct and manage the municipal employees directly. This was a disadvantage of the structure of the contract. The contractor was unable to adjust staffing levels. The contractor, though, was able to propose incentive payments to the municipal staff, based on their performance.

The contractor worked with a "Technical Counterpart Team", comprising of representatives of the municipalities. The contractor was in a position to reward members of this Team with incentive payments, based on the number of hours they contributed to tasks and their performance.

The operator was also responsible for managing $12m USD of investments for the four year contract (and a further $3m USD per year for the three years of contract extension).

A.4.6 Results achieved

From 1996-1998, unaccounted for water fell by 35% compared to levels in 1995. Water consumption for the same period was 50% higher than in 1995. Total revenue collected increased by 50% from 1996 to 1997. In particular they achieved or exceeded targets in the following areas:

- Leak detection – exceeded target (Target 1,050 km surveyed, actual surveyed was 1,261 km)
- Service connection replacement – exceeded target (Target was 20,000 connections replaced, actual number of connections replaced was 22,337)
- Meter repair and replacement – exceeded target (target was 30,000 meters replaced, actual number of meters replaced was 30,687)
- Improvements in wastewater discharge
- Identification of illegal connections

Summary of Performance Targets for Gaza'a Management Contract

	Year 1 (09/96-08/97)		Year 2 (09/97-08/98)		Year 3 (09/98-08/99)	
Performance Groups	Weight assigned	Score achieved	Weight assigned	Score achieved	Weight assigned	Score achieved
Improving quantity of water	0.46	1.6	0.53	1.2	0.52	1.0
Improving quality of water	0.24	1.0	0.28	1.0	0.38	1.0
Improving Management	0.21	3.2	0.11	2.9	0.07	1.9
Promoting Institutional Development	0.09	4.1	0.08	2.5	0.03	2.3

Source: Deloitte & Touche, Norway, Third Annual Report, November 26, 1999.

Score Key:
- 1 represents Excellent
- 2 represents Very Good
- 3 represents Good
- 4 represents Fair
- 5 represents Poor

Incentive Compensation for the Gaza Management Contract

Year 1		Year 2		Year 3		Year 4
Contractual Ceiling [1/]	Actual Paid	Contractual Ceiling [2/]	Actual Paid	Contractual Ceiling	Actual Paid	Contractual Ceiling
$444,000	$444,000	$1,025,400	$792,000	$750,000	$720,000	750,000

Notes:

1/ According to Contract Amendment dated December 3, 1997, targets of the first year were accumulated to be achieved with the targets of the second year. The incentive compensation of $306,000 related to the delayed tasks was transferred to the budget of the second year incentive less a time delay penalty of $30,600.

2/ Includes $275,400 net incentive compensation transferred from Year 1 to Year 2 after deduction of time delay penalty.

A.5 MANAGEMENT CONTRACT FOR WATER SERVICES IN AMMAN, JORDAN

In February 1999, Lyonaise des Eaux won the water and wastewater management contract for Greater Amman, Jordan, with 1.6 million inhabitants. The selected consortium (LEMA) includes Lyonnaise des Eaux (75%) and Montgomery Watson-Arabtech Jardaneh (25%). The contract began in 1999 and was due to run for 4 ½ years. It was subsequently extended until the end of 2005. The objective of the work was to improve the efficiency of the water distribution system through leakage management, network rehabilitation and a program of meter repair and replacement. A special Program Management Unit was set up within the Ministry of Water And Irrigation to monitor the progress of the contract implementation.

Figure __ shows the institutional framework for the management contract.

A.5.1 Personnel roles and responsibilities

The contractor provided 7 full time experts for the project, including a Managing Director. The Managing Director worked in parallel with a local managing director that had responsibility for government relations. The other 6 expatriate staff headed up the main departments. In addition, the contractor provided over 18,000 hours/year of staff training.

The contractor's responsibilities included:

- Operation of the facilities for collection of water from source, treatment and distribution to customers
- Operation of the facilities to collect wastewater, treat the wastewater
- Develop a comprehensive maintenance program and improve the overall standards of maintenance
- Carry out all billings, collections, and customer service functions

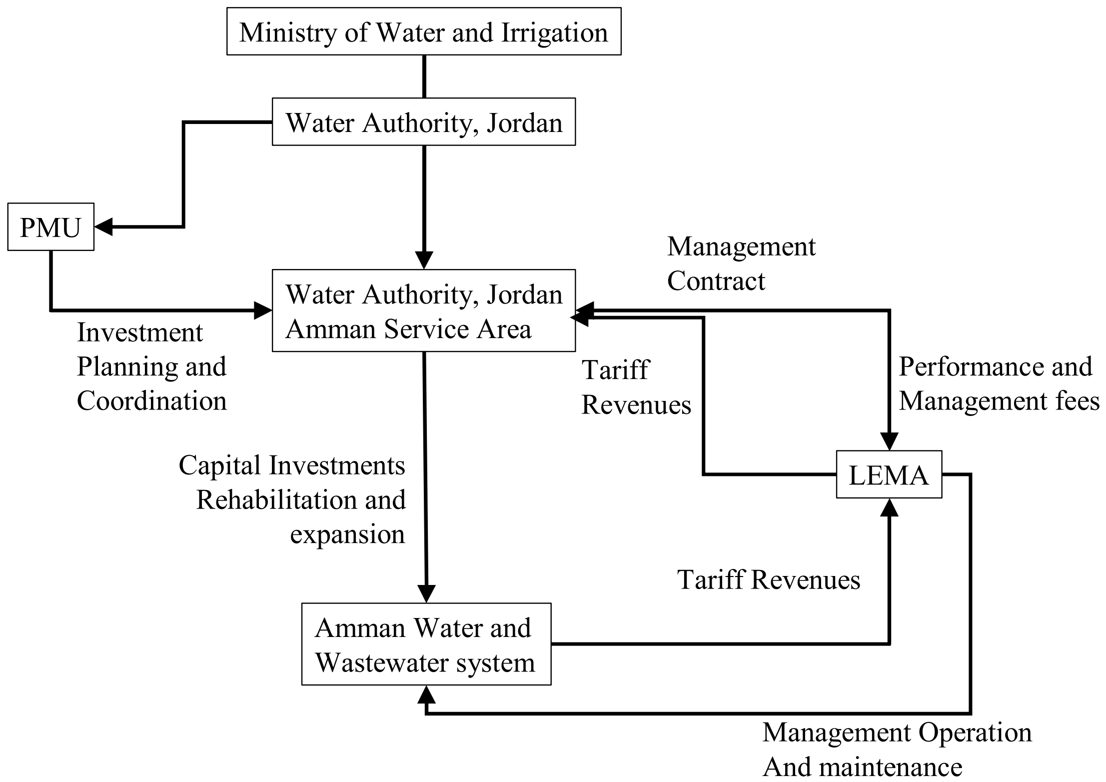

Figure 1 Organizational Structure of Amman Water Sector

A.5.2 Approach to tendering

The tendering process was carried out in accordance with the World Bank guidelines for two-stage bidding.

The bidder short-list was developed through full pre-qualification using the following criteria:

- Specified average annual turnovers over the prior 3-5 years

- Experience in operation, management, billing and collecting in at least two cities of similar size;
- Proposed project director and core team with experience between 10-15 years

10 companies were pre-qualified but only two companies submitted bids. Technical proposals were evaluated first. For those that achieved a minimum technical score, their financial proposals were then evaluated. Bidding was very aggressive, and it appeared that both companies were willing to buy the business through low financial bids.

The tendering process was managed by the Management Contract Directorate, a sub-division of the Program Management Unit, located within the Ministry of Water and Irrigation.

A.5.3 Compensation

Compensation was in the form of a fixed fee and a performance based fee. The fixed fee was $8.8m for the initial four years of the contract. The fixed fee was financed by the World Bank.

A.5.4 Performance incentives

In addition to the fixed fee, the contractor is also paid a performance fee, contingent on the improved financial performance and net incremental cash flow. The performance incentive compensation formula is constructed around the principle that improved performance is a function of three factors: 1) revenue optimization; 2) improved collection efficiency; and 3) cost control. The Performance Incentive Compensation (PIC) formula is based on a calculation designed to compare the financial performance of the water and wastewater system in the base year with the performance of the system under the contractor in each year of the contract. The PIC formula was adjusted to eliminate certain potential windfalls not related to financial performance, such as windfall profits from tariff restructuring.

The performance incentive formula was calculated as follows:

$$PIC = (X)\% \times \{[R^{(n)}-R^{(n-1)}]-[E^{(n)} - E^{(n-1)}]\}$$

Where:

PIC = Performance incentive compensation in absolute amount
(X)% = Percent of improvements in financial performance that will be paid to the contractor
$R^{(n)}$ = Eligible cash receipts from operating revenues in contract year (n)
$R^{(n-1)}$ = Eligible cash receipts from operating revenues in contract year (n-1)
$E^{(n)}$ = Eligible operating expenses in contract year (n)
$E^{(n-1)}$ = Eligible operating expenses in contract year (n-1)

The PIC was paid based on the statement of operations prepared by the operator. The prepared statement is then audited by an independent auditor.

In this contract the bidders bid for the level of performance fee (X in the above formula) they wanted to be paid. This was expressed as a percentage of the incremental profits arising from the management contract. The winning bidder agreed to be paid 5% of the incremental profit.

This approach of bidding the performance fee appeared to have some drawbacks. It encouraged the bidders to include any risk premium in the fixed fee that they bid because there was uncertainty over the actual performance payment if they met the target. Given that the performance fee was a function of the quality of the baseline data for calculating performance improvements, the bidders were unsure of the quality of data, and so the performance fee was more risky.

Another aspect of this contract that differed from the other examples is that the contractor will be subject to withholding and liquidated damages in the event that they fail to perform. This meant that, in theory, the performance fee could be negative, if the liquidated damages exceeded the PIC.

A.5.5 Span of Control

The contractor had full operational control of all operations, maintenance, billing and collection activities. They also had extensive control over staffing levels and staff compensation. The contractor had the option of returning up to 50% of the staff back to head office. In the first year, they actually returned only 10% of the staff. They also introduced a performance bonus plan for staff. The management contract had 40 main targets that were allocated to differed departments. Each month, based on whether the department had met their departmental performance targets (tied to the overall contract performance targets), the department head would be allocated a specific bonus budget, to be distributed to staff members.

The contractor also had responsibility for implementing a World Bank financed investment program, with an operating investment fund of $24m. They were not responsible for either financing the investments or determining investment priorities; that was done by the Project Management Unit.

A.5.6 Results achieved

The overall results of the project can be summarized as follows:

- Higher revenues and reduced unaccounted for water
- Reduced response time and improved network maintenance and repairs
- Improved staff training, higher wages and incentives
- Extensive use of computerized techniques and information technology
- Transparent performance and credibility with customers

The following are preliminary (unaudited) results of the first 6 months of operations:

- Leaks reduced from 350 to 130 (benchmark: 20)
- 31,917 leaks repaired
- 68% leaks repaired in less than 24 hours
- 30,804 meters realigned and rewired or renewed
- Tender evaluation completed for purchasing 15,000 meters
- Central complaints & control Center covering all Amman established and functioning

- Rationing program provides equality of supply
- Tanker management reduces losses from 15% to 1%
- Planned maintenance on pumps reduces breakdowns by 80%
- Planned sewer cleaning introduced, 40 kms cleaned as of end of February,
- Response to complaints for sewerage problems in less than 12 hours
- JOD 1,180,000 extra-unexpected revenue from sewage invoiced, JOD 690,000 collected
- Illegal storm water connection schedule, 1,450 visited houses, 254 illegal connections (17.5%) of which 74 disconnected
- Water Maintenance Management systems (GIS) software re-written
- 219,644 billing database subscribers coded into the GIS so that billing data can be used geographically to manage business
- Collection rate for January 2000 more than 18% higher than October 1999 (with 4 fewer working days)
- More than 8,500 disconnections with a new internal caps precluding easy illegal use. 4,800 reconnections
- 4,900 new water connections installed

Appendix B Options for DisCo Management Outsourcing

Options for
DisCo Management Outsourcing

1

Overview of Presentation

- DisCo Management Options
  - Status Quo
  - Concession
  - Management Contract
  - Management Advisor
  - Pros and Cons
  - Effectiveness Comparison
- Management Contract: Organization Options
  - Option A: covers entire Zone
  - Option B: at District only
  - Option C: Hybrid
  - Management Advisor Option
  - Pros and Cons

2

Overview of Presentation (Continued)

- International Examples
  - NITEL Management Contract
  - NEPA RCM
  - TANESCO (Tanzania) Management Contract
  - SAPP Management Advisor
- Will a Management Contract Help?
- Conclusions

3

DisCo Management Options

4

Concession

- Overview
  - Contractor controls company, but does not own assets
  - Contractor keeps collected revenue
  - Makes lease payment for use of assets
  - Profit = Revenue – Cost
  - Multi-year Business Plan and performance targets
  - Contractor must invest
  - 10-20 year term
  - Subject to regulatory oversight
- Examples
  - NEPA Thermal Plant Rehabilitate-Operate-Transfer (ROT)
  - Water (Manila, Latin America, U.S., China, India, etc)
  - Uganda distribution concession is under negotiation
  - **Not many examples of concessions for electricity distribution**

5

Management Contract

- Overview
  - Contractor manages the business
  - Staff provided by NEPA
  - Contractor compensation covers fees, expenses and bonus
  - Collected revenue remitted to NEPA HQ
  - Budgets decided by NEPA, not Contractor
  - Some investment required from Contractor
  - Indicative business plan prepared by Contractor
  - 2-3 year term with option to extend
- Examples
  - NITEL
  - NEPA RCM (limited span of control)
  - TANESCO (Tanzania)
  - Increasingly common in Africa and Asia

6

Advantages of Management Contract

- Minimal conflict with privatization program
  - BPE buy-in essential
  - BPE should manage contract negotiation and award (e.g. NITEL)
- Improved practices and performance
- New ideas can break up entrenched bureaucracy
- Training for future managers
- Manageable downside risk
  - Contract costs recovered if contractor performs
  - Quick termination possible
- Can be implemented quickly
- No requirement for GoN financial guarantees

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Necessary Conditions for Successful Management Contract

- Autonomy from NEPA bureaucracy
- Financial independence
- Broad span of executive control
- Performance based compensation
- Political support
- Funds available for identified priority investments, including metering
- New billing system
- Important to gain NEPA buy-in to counter doubts about RCM

8

Management Advisor

- Overview
  - Resident management expert(s) provided by Contractor
  - Compensation covers fees and expenses
  - No investment by Contractor
  - 2-4 year term
- Examples
  - Full time advisors common in Africa and Persian Gulf
  - Uganda, Tanzania, Mozambique, Southern Africa Power Pool, others

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Pros and Cons

	Status Quo	Concession	Management Contract	Management Advisor
Pros	• Minimal employee opposition	• Best chance for major improvements • Contractor has free hand • Profit incentive • Attracts capital investment	• Good chance for improvements • Contractor has bonus incentive • Provides training and succession planning	• Cost effective • Potential for immediate improvement using best practices • Provides training
Cons	• Continuing poor performance	• Too few willing and qualified contractors • Potential for political and employee opposition • NERC not in place	• Contractor has restricted span of control • Conflicts with NEPA over budgets, control, coordination and payments • Employee opposition	• Contractor relatively powerless • Difficult to break up bureaucracy • No capital investment • Powerless to mobilize support of NEPA staff at all levels • Minimal improvement on status quo

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Effectiveness Comparison

	Concession	Management Contract	Management Advisor	Status Quo
Technical competence	■	■	■	■
Efficient work processes	■	■	□	□
Adequate span of control	■	□		□
Follow through	■	■		
Support of staff and union	□	□	■	■
Local knowledge	□	□	□	■
Initiative	■	■	□	
New ideas and management practices	■	■	■	
Autonomy from HQ interference	■	□		
Access to investment capital	■	□		
Lasting impact	■	□		
Automation and computerization	■	■	□	

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Management Contract Organization Options

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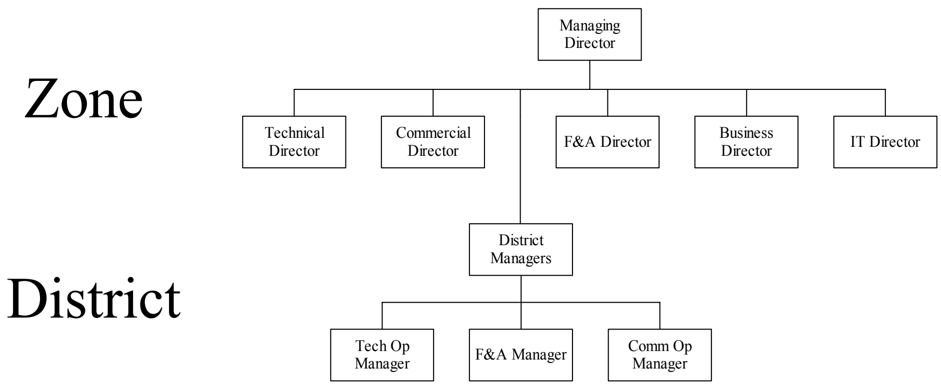
DisCo Management Structure

per NEPA DisCo Set-up Team



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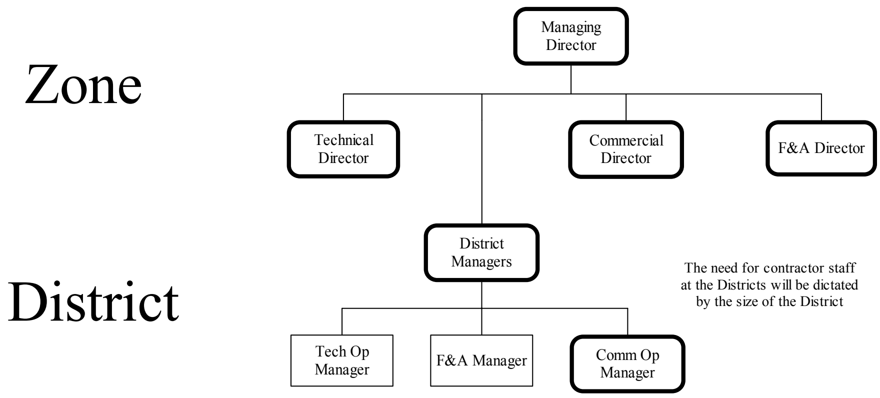
DisCo Management Contract
Org Option A: Covers Entire Zone



Note: Boxes shown in bold outline indicate positions allocated to Contractor.

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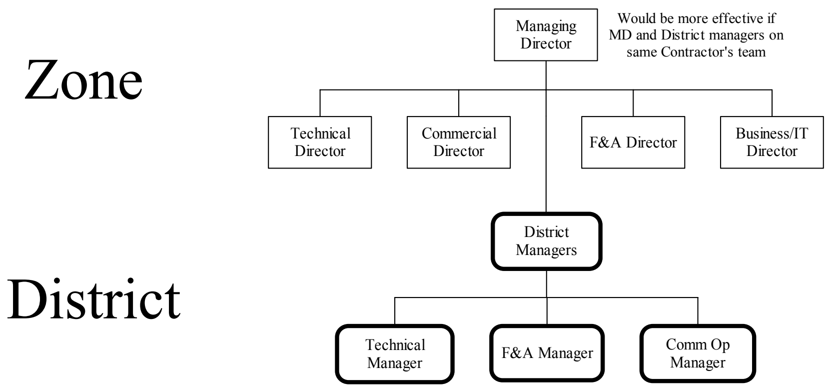
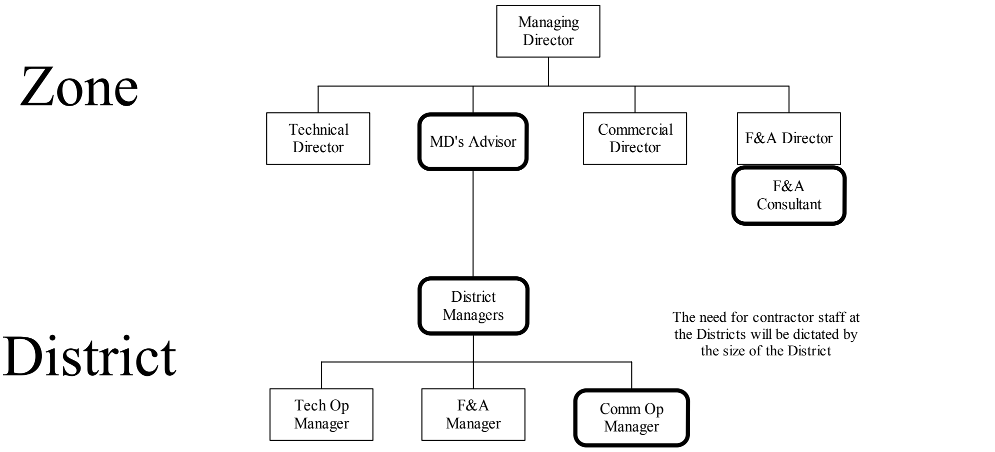
DisCo Management Contract
Organization Option B: at District



Note: Boxes shown in bold outline indicate positions allocated to Contractor.

15

DisCo Management Contract Organization Option C: Hybrid



Note: Boxes shown in bold outline indicate positions allocated to Contractor.

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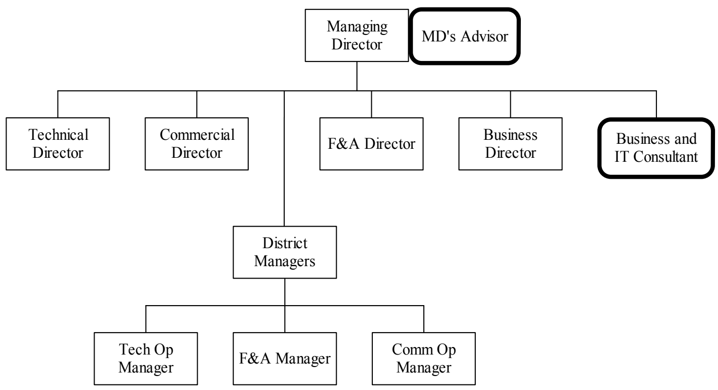
DisCo Management Advisor



Note: Boxes shown in bold outline indicate positions allocated to Contractor.

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Organization Options Pros and Cons

	Option A: at Zone and District	Option B: at District only	Option C: Hybrid
Pros	• Contractor has maximum executive control • More influence company-wide • Can standardize practices across all Districts	• Districts are closest to on-the-ground problems	• Reserves top positions at Zone for NEPA • Contractor has influence at Zone and control at District
Cons	• Resistance from incumbent managers at the Zones and Districts	• Less control over budgeting • Contractor in a weak position vis-à-vis the Zone and other Districts • Contractor's practices may conflict with the rest of the Zone • More Contractor staff required; more costly than Option A • Buried under NEPA bureaucracy • Most Districts under $6 million in annual revenue; too small	• Still under NEPA bureaucracy

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International Examples

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International Examples NITEL Management Contract

- 3-year contract beginning March 2003
- Pentascope (Netherlands telecoms consultancy) provides 6 executive directors; 3 for NITEL and 3 for MTEL; CEO, CFO and Technical
- Consultants for
  - Business Plan
  - Network plan
  - Marketing plan and customer systems
  - HR and training
  - Tariff and financial
- Contract planned and negotiated by BPE
- Compensation: 1) 50% management/consult fees; 2) 50% bonus
- Performance targets for infrastructure, EBIT, faults, collections etc

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International Examples NITEL Management Contract

- Labor issues addressed through negotiated cooperation agreements with the union (no retrenchment) and with incumbent managers
- Balance sheet and pension fund restructured and agreed with GoN; debt to GoN converted to equity
- BPE allocated funding up front for mobilization and consultancies
- Pentascope was required to produce a binding 3-year Business Plan
- CEO authority limit raised from 70,000 Naira to $250,000
- Formed executive planning committee of 3 Pentascope reps, 2 BPE, 1 Ministry; can approve projects up to $1 Million
- No Government or Ministry interference – Pentascope to operate like a private company
- Pentascope to train managers to take over in 3 years
- Initial problems: Pentascope's span of control; GoN interference; payment of mobilization fee and advance on consultancies

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International Examples
NEPA RCM Program

- 3-year contracts with possible extension
- Covers billing, metering and marketing at the District level
- RCM contractors provide 4 managers: District Marketing Manager; IT, Commercial, Technical
- Reports to NEPA HQ Marketing Sector (not Zone GM)
- Has authority over District marketing staff
- Contractor expected to invest up to $700,000 of own capital for vehicles, computers, systems etc; some Contractors have not done it
- NEPA provides bare-bones imprest for operating costs
- Contractual performance bonus up to 25% of collections above target
- Target Performance Ratio = Billing Ratio x Collection Ratio

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International Examples
NEPA RCM Program - Issues

- Awkward relationship with Zone and other Districts in the same Zone, because contractor reports to NEPA HQ
- Too many players in single Zone
- Interference by NEPA management; mistrust on both sides
- NEPA staff resentment
- Contractor has no hire/fire authority
- Poor coordination between RCM marketing side and distribution side
- NEPA HQ slow to pay RCM invoices to recoup invested capital
- No capital budget provided by NEPA
- Acute shortage of meters, which are procured at NEPA HQ
- Outdated billing software and no provision for new software
- Performance measure tricky to quantify
- No performance bonuses have been paid to date
- For small Districts, RCM fees eat up too much of the savings
- No sharing of lessons learned; contractor capabilities under used

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International Examples
NEPA RCM - Conclusions

- Need to increase span of authority
  - Capital and expense budgets
  - Spending limits
  - Meter maintenance and reconnection fees
  - Staff deployment
  - Meter procurement
  - Wires side?
- Contractor invoices should be out of hands of HQ F&A (can be handled by forthcoming Market Operator)
- Contractor should produce binding Business Plan
- Need consultant for company-wide metering and billing strategy
- Need mechanism to share lessons learned across all Zones
- **Would be more effective if contract covers all distribution and marketing functions at Zone and Districts**

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International Examples
TANESCO (Tanzania)

- TANESCO is the national electric utility (G,T&D)
- Management Contract awarded to NETGroup (S.A.)
- 4 top executive managers
  - Managing Director
  - Technical
  - D&M
  - Finance
- 2 year term with 1 year optional extension
- Management fee plus significant success fee (50:50)
- Full control of company
- Detailed performance targets: Losses, collection rate, connections, fuel consumption, customer service, etc

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International Examples TANESCO (Tanzania) - Results

- Collections up from 76% to 90% over 18 months
- Losses down from 27% to 23%
- Leakages of funds and unauthorized payments stopped
- Expenses reduced
- Better prices from suppliers
- Supplier invoices settled on time
- Manpower cut by 15%
- Staff resentment still problematic

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International Examples SAPP Management Advisor

- Contractor provides resident advisor to So. Africa Power Pool Coordination Center in Harare
- 2-year initial term; annual renewal
- Time and materials contract
- Contractor serves as Managing Director for first 2 years; trains successor; moves to backup role for remainder of contract
- Contractor seen as team member; minimal opposition from incumbent staff

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Will a Management Contract Help?

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Will a Management Contract Help?

Issue	Cause	Remedy	Will Mgmt Contract Help?
Lack of funds	Poor collections; inefficient use of resources; low tariffs	Improve collections; increase tariffs	Yes
Poor internal controls	Entrenched bureaucracy	New ideas and best practices; strict management controls	Yes
Billing software	Outdated software	Implement new systems	Yes
Interference from HQ	Bureaucracy; entrenched interests; inefficient treasury function	Break up entrenched interests	Yes
Unmotivated staff	Overstaffing; complacency	Carrot and stick incentives	Yes

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Will a Management Contract Help?

Issue	Cause	Remedy	Will Mgmt Contract Help?
Poor Collections Performance	Customers do not want to pay because of poor service	Customer Education; pre-paid meters	No
	Bills “fixed” by corrupt staff	Better internal controls	Yes
	Erroneous bills; poor billing and metering practices	New billing procedures; automation; internal controls	Yes
	Logistical difficulties with cash centers	New approaches to reduce inconvenience to customers	Maybe
	Poverty	None	No
	Customer mobility; no forwarding address	Involve landlords; collect deposits up front; pre-paid meters	Maybe

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Will a Management Contract Help?

Issue	Cause	Remedy	Will Mgmt Contract Help?
Inadequate Metering	Acute shortage of retail meters	Allocate funds; competitive procurement; company-wide metering strategy	Maybe
	Outdated meters still in use	Develop metering strategy	Yes
	Faulty meters and delays in fixing meters	Develop metering strategy	Yes
	Long billing and collection cycle	New billing and collection practices	Yes
	Readings “doctored”by corrupt NEPA staff	Better internal controls	Yes
	Human error	Automation	Maybe

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Conclusions

- A management contract could improve DisCo performance
- Recommend Option A: Contractor manages Zone and Districts
- Need upfront agreement on:
  - Binding Business Plan
  - Contractor investment
  - Procurement of meters
  - Streamlined payment of invoices
  - Transparent incentives
  - Span of control
  - Non-interference
- BPE has to buy in and should conduct tender and negotiations

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